

WEST Search History

DATE: Thursday, September 16, 2004

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L21	Tew-K-D.IN.	2
<input type="checkbox"/>	L20	Tew-Ken-D.IN.	0
<input type="checkbox"/>	L19	Tew-Kenneth-D.IN.	2
<input type="checkbox"/>	L18	ABCA2	12
<input type="checkbox"/>	L17	L16 AND ABCA2	2
<input type="checkbox"/>	L16	536/23.1,23.5.CCLS.	17646
<input type="checkbox"/>	L15	L14	0
<input type="checkbox"/>	L14	536/23.1,23	0
<input type="checkbox"/>	L13	L12 AND ABCA2	2
<input type="checkbox"/>	L12	L11 AND ABC transporter	265
<input type="checkbox"/>	L11	435/252.3,254.11,254.2,320.1,348,419.CCLS.	29531
<input type="checkbox"/>	L10	Chen.IN.	84605
<input type="checkbox"/>	L9	Chen-Z.IN.	1987
<input type="checkbox"/>	L8	Chen-Zhijian.IN.	2
<input type="checkbox"/>	L7	Vulevic.IN.	1
<input type="checkbox"/>	L6	Vulevic-B.IN.	1
<input type="checkbox"/>	L5	Vulevic-Bojana.IN.	0
<input type="checkbox"/>	L4	Tew.IN.	615
<input type="checkbox"/>	L3	Tew-K.IN.	0
<input type="checkbox"/>	L2	Tew-Ken.IN.	0
<input type="checkbox"/>	L1	(Tew-Kenneth.IN.)	0

END OF SEARCH HISTORY

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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: WO 200121798 A2, EP 1214415 A1, AU 200112495 A

Using default format because multiple data bases are involved.

L6: Entry 1 of 1

File: DWPI

Mar 29, 2001

DERWENT-ACC-NO: 2001-257989

DERWENT-WEEK: 200240

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: New nucleic acid molecule for screening inhibitors of human ABCA2 mediated transport, encoding a human ABCA2 transporter protein with a multi-domain structure including glycosylation and phosphorylation sites

INVENTOR: CHEN, Z; TEW, K D ; VULEVIC, B

PRIORITY-DATA: 1999US-154839P (September 20, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200121798 A2</u>	March 29, 2001	E	068	C12N015/12
<u>EP 1214415 A1</u>	June 19, 2002	E	000	C12N015/12
<u>AU 200112495 A</u>	April 24, 2001		000	C12N015/12

INT-CL (IPC): C12 N 15/12

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWOC	Draw. Des.
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
Vulevic-B.IN.	1

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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20040166503 A1

Using default format because multiple data bases are involved.

L8: Entry 1 of 2

File: PGPB

Aug 26, 2004

PGPUB-DOCUMENT-NUMBER: 20040166503

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040166503 A1

TITLE: Methods for gene expression profiling

PUBLICATION-DATE: August 26, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
<u>Chen, Zhijian</u>	Elkins Park	PA	US	
Shen, Hongxie	Elkins Park	PA	US	
Tew, Kenneth D.	Plymouth Meeting	PA	US	

US-CL-CURRENT: 435/6; 435/91.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw. Desc.
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☐ 2. Document ID: WO 2090564 A1

L8: Entry 2 of 2

File: EPAB

Nov 14, 2002

PUB-NO: WO002090564A1

DOCUMENT-IDENTIFIER: WO 2090564 A1

TITLE: METHODS FOR GENE EXPRESSION PROFILING

PUBN-DATE: November 14, 2002

INVENTOR-INFORMATION:

NAME	COUNTRY
CHEN, ZHIJIAN	US
SHEN, HONGXIE	US
TEW, KENNETH D	US

INT-CL (IPC): C12 P 19/34; C12 Q 1/68; C07 H 21/04; C07 H 21/02; C07 H 21/00

ABSTRACT:

CHG DATE=20030114 STATUS=N>A method for detecting differentially expressed genes in a test sample is provided.

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Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMIC	Draw Desc
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Terms	Documents
Chen-Zhijian.IN.	2

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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20030087246 A1

Using default format because multiple data bases are involved.

L13: Entry 1 of 2

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087246 A1

TITLE: Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	MD	FR	
Prades, Catherine	Thiais		FR	
Naudin, Laurent	Etampes		FR	
Lemoine, Cendrine	Massy		FR	
Dean, Michael	Frederick		US	
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	

US-CL-CURRENT: [435/6](#); [435/320.1](#), [435/325](#), [435/69.1](#), [435/91.2](#), [530/350](#), [536/23.5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Des.
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☐ 2. Document ID: US 20030044895 A1

L13: Entry 2 of 2

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044895

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030044895 A1

TITLE: Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur	NY	FR	
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thiais		FR	

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Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	FR
Duverger, Nicolas	Paris	FR
Allikmets, Rando	Cornwall-on Hudson	US
Dean, Michael	Frederick	US

US-CL-CURRENT: [435/69.1](#); [435/320.1](#), [435/325](#), [435/6](#), [530/350](#), [536/23.5](#)

ABSTRACT:

The present invention relates to nucleic acids corresponding to various exons of ABCA5, ABCA6, ABCA9, and ABCA10 genes as well as cDNAs encoding the novel full length of ABCA5, ABCA6, ABCA9, and ABCA10 proteins. The invention also relates to means for the detection of polymorphisms in general, and of mutations in particular, in the ABCA5, ABCA6, ABCA9, and ABCA10 genes or in the corresponding protein produced by the allelic form of the ABCA5, ABCA6, ABCA9, and ABCA10 genes.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. Desc.
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Terms

Documents

L12 AND ABCA2

2

Display Format:

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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20030087246 A1

Using default format because multiple data bases are involved.

L17: Entry 1 of 2

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087246 A1

TITLE: Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	MD	FR	
Prades, Catherine	Thiais		FR	
Naudin, Laurent	Etampes		FR	
Lemoine, Cendrine	Massy		FR	
Dean, Michael	Frederick		US	
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	

US-CL-CURRENT: [435/6](#); [435/320.1](#), [435/325](#), [435/69.1](#), [435/91.2](#), [530/350](#), [536/23.5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc.
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☐ 2. Document ID: US 20030044895 A1

L17: Entry 2 of 2

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044895

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030044895 A1

TITLE: Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur	NY	FR	
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thiais		FR	

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Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	FR
Duverger, Nicolas	Paris	FR
Allikmets, Rando	Cornwall-on Hudson	US
Dean, Michael	Frederick	US

US-CL-CURRENT: [435/69.1](#); [435/320.1](#), [435/325](#), [435/6](#), [530/350](#), [536/23.5](#)

ABSTRACT:

The present invention relates to nucleic acids corresponding to various exons of ABCA5, ABCA6, ABCA9, and ABCA10 genes as well as cDNAs encoding the novel full length of ABCA5, ABCA6, ABCA9, and ABCA10 proteins. The invention also relates to means for the detection of polymorphisms in general, and of mutations in particular, in the ABCA5, ABCA6, ABCA9, and ABCA10 genes or in the corresponding protein produced by the allelic form of the ABCA5, ABCA6, ABCA9, and ABCA10 genes.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. Des.
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Terms	Documents
L16 AND ABCA2	2

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Search Results - Record(s) 1 through 12 of 12 returned.

☐ 1. Document ID: US 20040072160 A1

Using default format because multiple data bases are involved.

L18: Entry 1 of 12

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040072160

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040072160 A1

TITLE: Molecular toxicology modeling

PUBLICATION-DATE: April 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mendrick, Donna	Gaithersburg	MD	US	
Porter, Mark	Gaithersburg	MD	US	
Johnson, Kory	Gaithersburg	MD	US	
Higgs, Brandon	Gaithersburg	MD	US	
Castle, Arthur	Gaithersburg	MD	US	
Elashoff, Michael	Gaithersburg	MD	US	

US-CL-CURRENT: 435/6; 435/91.2, 436/84

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGs	Drawings
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☐ 2. Document ID: US 20040014040 A1

L18: Entry 2 of 12

File: PGPB

Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040014040

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040014040 A1

TITLE: Cardiotoxin molecular toxicology modeling

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mendrick, Donna	Gaithersburg	MD	US	
Porter, Mark	Gaithersburg	MD	US	
Johnson, Kory	Gaithersburg	MD	US	
Higgs, Brandon	Gaithersburg	MD	US	
Castle, Arthur	Gaithersburg	MD	US	

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Elashoff, Michael Gaithersburg MD US

US-CL-CURRENT: 435/6; 702/20

ABSTRACT:

The present invention is based on the elucidation of the global changes in gene expression and the identification of toxicity markers in tissues or cells exposed to a known cardiotoxin. The genes may be used as toxicity markers in drug screening and toxicity assays. The invention includes a database of genes characterized by toxin-induced differential expression that is designed for use with microarrays and other solid-phase probes.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Des
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☐ 3. Document ID: US 20030087246 A1

L18: Entry 3 of 12

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087246 A1

TITLE: Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne	MD	FR	
Prades, Catherine	Thiais		FR	
Naudin, Laurent	Etampes		FR	
Lemoine, Cendrine	Massy		FR	
Dean, Michael	Frederick		US	
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	

US-CL-CURRENT: 435/6; 435/320.1, 435/325, 435/69.1, 435/91.2, 530/350, 536/23.5

ABSTRACT:

The present invention relates to a novel human ABCA12 gene as well as cDNAs encoding the novel full and short length ABCA12 proteins. The invention also relates to vectors and recombinants host cells comprising such nucleic acids, nucleotide probes and primers, and means for the detection of polymorphisms and mutations in the ABCA12 gene or in the corresponding protein produced by the allelic form of the ABCA12 gene.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Des
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☐ 4. Document ID: US 20030077591 A1

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L18: Entry 4 of 12

File: PGPB

Apr 24, 2003

PGPUB-DOCUMENT-NUMBER: 20030077591
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030077591 A1

TITLE: Nucleic acid for regulating the ABCA7 gene, molecules modulating its activity and therapeutic applications

PUBLICATION-DATE: April 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur		FR	
Rosier-Montus, Marie-Francoise	Antony		FR	
Prades, Catherine	Thiais		FR	
Arnould-Reguigne, Isabelle	Sur Marne		FR	
Fortea, Jose Osorio Y	Evry		FR	
Duverger, Nicolas	Paris		FR	
Chimini, Giovanna	Marseille		FR	

US-CL-CURRENT: 435/6; 514/44, 536/23.2

ABSTRACT:

The present invention relates to nucleic acid sequences that regulate the transcription of the ABCA7 gene, which may be involved in the metabolism of lipids in hematopoietic tissues, as well as in cell signaling mechanisms linked to the immune reaction and to inflammation. The invention also relates to polypeptides and polynucleotides that may be involved in diseases associated with the genetic locus q13 of chromosome 19.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KNOW	Draw Des
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☐ 5. Document ID: US 20030044895 A1

L18: Entry 5 of 12

File: PGPB

Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044895
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030044895 A1

TITLE: Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Denefle, Patrice	Saint Maur	NY	FR	
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thiais		FR	
Arnould-Reguigne, Isabelle	Chennevieres Sur Marne		FR	
Duverger, Nicolas	Paris		FR	

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Allikmets, Rando	Cornwall-on Hudson	US
Dean, Michael	Frederick	US

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/6, 530/350, 536/23.5

ABSTRACT:

The present invention relates to nucleic acids corresponding to various exons of ABCA5, ABCA6, ABCA9, and ABCA10 genes as well as cDNAs encoding the novel full length of ABCA5, ABCA6, ABCA9, and ABCA10 proteins. The invention also relates to means for the detection of polymorphisms in general, and of mutations in particular, in the ABCA5, ABCA6, ABCA9, and ABCA10 genes or in the corresponding protein produced by the allelic form of the ABCA5, ABCA6, ABCA9, and ABCA10 genes.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc.
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☐ 6. Document ID: US 20020192821 A1

L18: Entry 6 of 12

File: PGPB

Dec 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020192821

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020192821 A1

TITLE: Increased functional activity and/or expression of ABC transporters protects against the loss of dopamine neurons associated with Parkinson's disease

PUBLICATION-DATE: December 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Reiner, Peter B.	Vancouver		CA	
Roy, Josee	Vancouver		CA	
Connop, Bruce P.	Vancouver		CA	

US-CL-CURRENT: 435/455; 514/44

ABSTRACT:

Methods and compositions are provided for reducing the level of a catecholamine, in particular dopamine, and conjugates thereof, thus reducing catecholaminergic cell toxicity, by increasing a functional activity or increasing expression of ABC transporter polypeptides. ABC transporters serve to extrude dopamine and dopamine conjugates out of the neuron, thus preventing or reducing dopamine-associated toxicity, including cell death. Agents that increase a level of expression, or increase a functional activity, or increase both, of the ABC transporters find utility in preventing or alleviating Parkinson's disease.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc.
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☐ 7. Document ID: US 20020169137 A1

L18: Entry 7 of 12

File: PGPB

Nov 14, 2002

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PGPUB-DOCUMENT-NUMBER: 20020169137
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020169137 A1

TITLE: Regulation of amyloid precursor protein expression by modification of ABC transporter expression or activity

PUBLICATION-DATE: November 14, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Reiner, Peter B.	Vancouver		CA	
Connop, Bruce P.	Vancouver		CA	
Pollard, Michelle	Vancouver		CA	

US-CL-CURRENT: 514/44; 514/2

ABSTRACT:

The invention relates to the discovery that expression of amyloid precursor protein is regulated by the expression of an ABC transporter. The invention therefore provides methods and compositions for modulating amyloid precursor protein expression in a brain cell, thereby preventing or inhibiting pathological .beta.-amyloid plaque formation in conditions such as Alzheimer's disease.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWAC	Draw Desc
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☐ 8. Document ID: US 20020098999 A1

L18: Entry 8 of 12

File: PGPB

Jul 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020098999
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020098999 A1

TITLE: Compounds for sustained release of orally delivered drugs

PUBLICATION-DATE: July 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gallop, Mark A.	Los Altos	CA	US	
Cundy, Kenneth C.	Redwood City	CA	US	

US-CL-CURRENT: 514/1

ABSTRACT:

Disclosed are methods for providing sustained systemic blood concentrations of orally delivered drugs. Still further, disclosed are compounds and pharmaceutical compositions that are used in such methods.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc
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☐ 9. Document ID: US 20020016293 A1

L18: Entry 9 of 12

File: PGPB

Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020016293

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020016293 A1

TITLE: Flavopiridol drug combinations and methods with reduced side effects

PUBLICATION-DATE: February 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ratain, Mark J.	Chicago	IL	US	
Innocenti, Federico	Chicago	IL	US	
Iyer, Lalitha	Chicago	IL	US	

US-CL-CURRENT: 514/9; 514/105, 514/171, 514/252.13

ABSTRACT:

This invention provides methods, formulations and kits to reduce the toxicity of flavopiridol and analogs thereof. Disclosed are therapeutics and treatment methods employing such drugs in combination with agents that increase conjugative enzyme activity or glucuronosyltransferase activity, and agents that decrease biliary transport protein activity, such as cyclosporine A, the resultant effects of which are to decrease the significant side effects previously associated with treatment using these drugs. The invention also characterizes specific isoforms of glucuronyltransferase enzymes involved in glucuronidation of flavopiridols and their analogs.

Full	Title	Citation	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc
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☐ 10. Document ID: JP 2004147502 A

L18: Entry 10 of 12

File: JPAB

May 27, 2004

PUB-NO: JP02004147502A

DOCUMENT-IDENTIFIER: JP 2004147502 A

TITLE: HUMAN AND RAT ABCA2 GENE

PUBN-DATE: May 27, 2004

INVENTOR-INFORMATION:

NAME	COUNTRY
INAGAKI, NOBUYA	

INT-CL (IPC): C12 N 15/09; C07 K 14/47; C12 N 1/15; C12 N 1/19; C12 N 1/21; C12 N 5/10; C12 Q 1/68

ABSTRACT:

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PROBLEM TO BE SOLVED: To provide a polynucleotide having a base sequence of a human or a rat ABCA2 gene useful for diagnosis of diseases, etc., caused by an abnormality in metabolite transport and an ABCA2 protein encoded with the polynucleotide and to provide a method for diagnosing the diseases.

SOLUTION: The polynucleotide has a base sequence encoding the protein having a specific amino acid sequence derived from the human or the rat. The polynucleotide has a different base sequence by substitution, addition or deletion of one or a plurality of bases thereof. The method for diagnosing the diseases associated with the ABCA2 gene comprises comparing the base sequence of the polynucleotide with the base sequence of the ABCA2 gene in a biological sample obtained from a subject.

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Full	Title	Citation	Review	Classification	Date	Reference	Claims	KNOC	Draw Des
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11. Document ID: JP 2004147502 A, WO 200208424 A1, AU 200176686 A

L18: Entry 11 of 12

File: DWPI

May 27, 2004

DERWENT-ACC-NO: 2002-179907

DERWENT-WEEK: 200441

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TITLE: Adenosine triphosphate (ATP) binding cassette transporter gene ABCA2 of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ABCA2 activity as drugs and diagnosis of ABCA2-related diseases

INVENTOR: INAGAKI, N

PRIORITY-DATA: 2000JP-0225462 (July 26, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 2004147502 A</u>	May 27, 2004		081	C12N015/09
<u>WO 200208424 A1</u>	January 31, 2002	J	119	C12N015/12
<u>AU 200176686 A</u>	February 5, 2002		000	C12N015/12

INT-CL (IPC): C07 K 14/47; C12 N 1/15; C12 N 1/19; C12 N 1/21; C12 N 5/00; C12 N 5/10; C12 N 15/09; C12 N 15/12; C12 Q 1/68; G01 N 33/15; G01 N 33/50; G01 N 33/68

ABSTRACTED-PUB-NO: WO 200208424A

BASIC-ABSTRACT:

NOVELTY - Polynucleotides encoding adenosine triphosphate (ATP) binding cassette transporter protein ABCA2 of human or rat origin with fully defined sequences as given in the specification or derived from these by addition, deletion and/or substitution of one or more amino acid residues, are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) expression vectors including the polynucleotides;
- (2) host cells transformed by the vectors;
- (3) ABCA2 protein or its modified forms encoded by the polynucleotides;

(4) diagnosis of ABCA2-gene associated diseases by comparing the ABCA2 gene sequence in a biological sample isolated from a patient with that of the normal sequence; and

(5) screening potential promoters, inhibitors and regulators of ABCA2 activity.

ACTIVITY - Neuroprotective; nootropic; antiparkinsonian. No supporting data is given in the source material.

MECHANISM OF ACTION - ABCA2 promoter; ABCA2 inhibitor; ABCA2 regulator.

USE - Diagnosis, treatment and prevention of diseases associated with ABCA2, such as Alzheimer's disease, prion diseases, Huntington's disease, and Parkinson's disease.

Full	Title	Citation	Review	Classification	Date	Reference	Claims	KMC	Draw Desc
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12. Document ID: WO 200121798 A2, EP 1214415 A1, AU 200112495 A

L18: Entry 12 of 12

File: DWPI

Mar 29, 2001

DERWENT-ACC-NO: 2001-257989

DERWENT-WEEK: 200240

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TITLE: New nucleic acid molecule for screening inhibitors of human ABCA2 mediated transport, encoding a human ABCA2 transporter protein with a multi-domain structure including glycosylation and phosphorylation sites

INVENTOR: CHEN, Z; TEW, K D ; VULEVIC, B

PRIORITY-DATA: 1999US-154839P (September 20, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200121798 A2</u>	March 29, 2001	E	068	C12N015/12
<u>EP 1214415 A1</u>	June 19, 2002	E	000	C12N015/12
<u>AU 200112495 A</u>	April 24, 2001		000	C12N015/12

INT-CL (IPC): C12 N 15/12

ABSTRACTED-PUB-NO: WO 200121798A

BASIC-ABSTRACT:

NOVELTY - An isolated nucleic acid (I) comprising a sequence (S1) fully defined in the specification, encoding a 2436 amino acids long human ABCA2 transporter protein having a multi-domain structure including a number of glycosylation and phosphorylation sites, a lipocalin signature motif, nucleotide binding folds having walker A and B ATP binding sites, and a number of membrane spanning helices, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated RNA molecule transcribed from (I);
- (2) an antibody (Ab) immunologically specific for the protein encoded by (I);
- (3) a plasmid, vector or retroviral vector (II), comprising a nucleotide sequence (S1);
- (4) a host cell (III) or host animal (IV) comprising S1;

(5) screening a test compound for inhibition of human ABCA2 mediated transport, by providing a host cell expressing (I), contacting the host cell with a compound suspected of inhibiting human ABC2-mediated transporter activity, and assessing inhibition of transport mediated by the compound; and

(6) a kit for detecting the presence of human ABCA2-encoding nucleic acids in a sample, comprising oligonucleotide primers specific for amplification of human ABCA2-encoding nucleic acids, polymerase enzyme, amplification buffer, and human ABCA2 specific DNA for use as a positive control.

ACTIVITY - None given.

MECHANISM OF ACTION - Gene therapy; human ABCA2 mediated transport inhibitor. No biological data is given.

USE - Human ABCA2 transporter polypeptides and nucleic acid encoding them are useful for identification, detection and/or molecular characterization of components involved in the transport of molecules across cell membranes. (I) is useful as a probe to detect the presence of and/or expression of genes encoding ABCA2 proteins, and in gene therapy. A host cell (III) comprising (I) is useful for screening compounds that inhibit human ABCA2 mediated transport (all claimed).

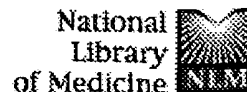
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☐ 1: Vulevic J, McCartney AL, Gee JM, Johnson IT, Gibson GR.

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Microbial Species Involved in Production of 1,2-sn-Diacylglycerol and Effects of Phosphatidylcholine on Human Fecal Microbiota.

Appl Environ Microbiol. 2004 Sep;70(9):5659-66.

PMID: 15345455 [PubMed - in process]

☐ 2: Vulevic J, Rastall RA, Gibson GR.

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Developing a quantitative approach for determining the in vitro prebiotic potential of dietary oligosaccharides.

FEMS Microbiol Lett. 2004 Jul 1;236(1):153-9.

PMID: 15212805 [PubMed - indexed for MEDLINE]

☐ 3: Chen ZJ, Vulevic B, He KE, Soulika A, Davis W Jr, Reiner PB, Connop BP, Nathwani P, Trojanowski JQ, Tew KD.

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Association of ABCA2 expression with determinants of Alzheimer's disease.

FASEB J. 2004 Jul;18(10):1129-31. Epub 2004 May 20.

PMID: 15155565 [PubMed - in process]

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Interaction of tubulin with a new fluorescent analogue of vinblastine.

Biochemistry. 2002 Nov 26;41(47):14010-8.

PMID: 12437358 [PubMed - indexed for MEDLINE]

☐ 5: Vulevic B, Chen Z, Boyd JT, Davis W Jr, Walsh ES, Belinsky MG, Tew KD.

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Cloning and characterization of human adenosine 5'-triphosphate-binding cassette, sub-family A, transporter 2 (ABCA2).

Cancer Res. 2001 Apr 15;61(8):3339-47.

PMID: 11309290 [PubMed - indexed for MEDLINE]

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Glutathione peptidomimetic drug modulator of multidrug resistance-associated protein.

J Pharmacol Exp Ther. 1999 Dec;291(3):1348-55.

PMID: 10565860 [PubMed - indexed for MEDLINE]

☐ 7: Vulevic B, Lobert S, Correia JJ.

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Role of guanine nucleotides in the vinblastine-induced self-association of tubulin: effects of guanosine alpha,beta-methylenetriphosphate and guanosine alpha,beta-methylenediphosphate.

Biochemistry. 1997 Oct 21;36(42):12828-35.

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Biophys J. 1997 Mar;72(3):1357-75.

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
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Interaction of vinca alkaloids with tubulin: a comparison of vinblastine, vincristine, and vinorelbine.

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PMID: 8639632 [PubMed - indexed for MEDLINE]

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
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Inhibition or down-regulation of protein kinase C attenuates late phase p70s6k activation induced by epidermal growth factor but not by platelet-derived growth factor or insulin.

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
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
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Bilt Hematol Transfuz. 1976;4(1-2):29-36. Serbian. No abstract available.

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[Clinico-epidemiological study on the digestive system diseases in students of the Belgrade university, high school and academy]

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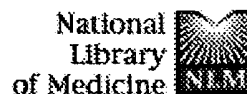
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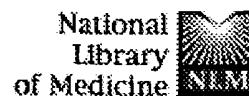
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Cloning and characterization of human adenosine 5'-triphosphate-binding cassette, sub-family A, transporter 2 (ABCA2).

Vulevic B, Chen Z, Boyd JT, Davis W Jr, Walsh ES, Belinsky MG, Tew KD.

Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA 19111, USA.

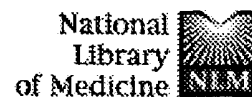
We have isolated the full-length cDNA for human ATP-binding cassette, sub-family A, member 2 transporter (ABCA2). The ORF of this cDNA encodes a protein consisting of 2436 amino acids with apparent molecular weight of M (r) 270,000. Accordingly, ABCA2 is the largest known mammalian ABC transporter described thus far. Analysis of mRNA expression levels indicated that ABCA2 is highest in human brain and has a broad expression pattern in a panel of tumor cell lines. Using specific antibodies to ABCA2 and various organelle marker proteins, ABCA2 was found to colocalize with the lysosomal/endosomal marker LAMP1, forming discrete, punctate intracellular vesicles. In ABCA2-transfected cells, the transporter also colocalized with a fluorescently labeled steroid analogue, estramustine. The sequestration of the steroid into the lysosomal/endosomal compartment indicates a potential substrate specificity for ABCA2. Furthermore, the presence of a lipocalin signature motif in the ABCA2 sequence suggests a possible broad role for this protein in the transport of steroids, lipids, and related molecules.

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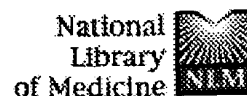
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Complete coding sequence, promoter region, and genomic structure of the human ABCA2 gene and evidence for sterol-dependent regulation in macrophages.

Kaminski WE, Piehler A, Pullmann K, Porsch-Ozcurumez M, Duong C, Bared GM, Buchler C, Schmitz G.

Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, Regensburg, 93042, Germany.

Members of the human ABC transporter A subfamily have gained considerable attention based on the recent findings that ABCA1 and ABCR (ABCA4) cause familial HDL-deficiency syndromes and distinct forms of hereditary retinopathies, respectively. Here we report the complete cDNA and the genomic organization of ABCA2, another member of the human ABC A transporter subfamily. The ABCA2 coding region is 7.3 kb in size and codes for a 2436 amino acid polypeptide that bears the typical features of a full-size ABC transporter. Among the known members of the ABC A subfamily ABCA2 shares highest homology with the cholesterol-responsive transporters ABCA1 (50%) and the recently cloned ABCA7 (44%). The ABCA2 gene comprises 48 exons which are localized within a genomic region of only 21 kb. Analysis of the putative ABCA2 promoter sequence revealed potential binding sites for transcription factors that are involved in the differentiation of myeloid and neural cells. Gene expression analysis in human macrophages showed that ABCA2 mRNA is induced during cholesterol import indicating that ABCA2 is a cholesterol-responsive gene. Our results suggest a potential role for ABCA2 in macrophage lipid metabolism and neural development.

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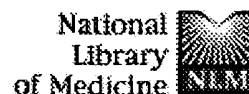
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HUGE: a database for human large proteins identified in the Kazusa cDNA sequencing project.

Nucleic Acids Res. 2000 Jan 1;28(1):331-2.

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Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

DNA Res. 1999 Oct 29;6(5):337-45.

PMID: 10574462 [PubMed - indexed for MEDLINE]

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Characterization of cDNA clones selected by the GeneMark analysis from size-fractionated cDNA libraries from human brain.

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Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

DNA Res. 1999 Jun 30;6(3):197-205.

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J Rheumatol. 1999 Mar;26(3):574-9.

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DNA Res. 1998 Dec 31;5(6):355-64.

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9: [Kikuno Y, Yokota H, Ikeno T, Okamoto F, Ishizaki M, Kawasaki S.](#) [Related Articles](#), [Links](#)



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10: [Kikuno K, Kita K, Nomura J, Hiwasa T, Yonemitsu H, Suzuki N.](#) [Related Articles](#), [Links](#)



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Biochem Biophys Res Commun. 1998 Dec 18;253(2):519-23.

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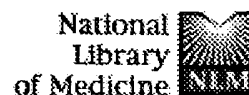
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Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.

Kikuno R, Nagase T, Ishikawa K, Hirose M, Miyajima N, Tanaka A, Kotani H, Nomura N, Ohara O.

Kazusa DNA Research Institute, Kisarazu, Chiba, Japan.

To extend our cDNA project for accumulating basic information on unidentified human genes, we newly determined the sequences of 100 cDNA clones from a set of size-fractionated human adult and fetal brain cDNA libraries, and predicted the coding sequences of the corresponding genes, named KIAA1019 to KIAA1118. The sequencing of these clones revealed that the average size of the inserts and corresponding open reading frames were 5.0 kb and 2.6 kb (880 amino acid residues), respectively. Database search of the predicted amino acid sequences classified 58 predicted gene products into the five functional categories, such as cell signaling/communication, cell structure/motility, nucleic acid management, protein management and cell division. It was also found that, for 34 gene products, homologues were detected in the databases, which were similar in sequence through almost the entire regions. The chromosomal locations of the genes were determined by using human-rodent hybrid panels unless their mapping data were already available in the public databases. The expression profiles of all the genes among 10 human tissues, 8 brain regions (amygdala, corpus callosum, cerebellum, caudate nucleus, hippocampus, substantia nigra, subthalamic nucleus, and thalamus), spinal cord, fetal brain and fetal liver were also examined by reverse transcription-coupled polymerase chain reaction, products of which were quantified by enzyme-linked immunosorbent assay.

PMID: 10470851 [PubMed - indexed for MEDLINE]

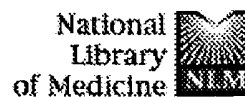
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
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
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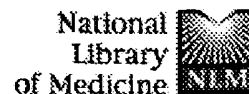
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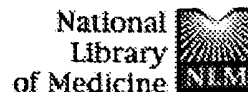
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Centre d'Immunologie, INSERM-CNRS de Marseille-Luminy, France.

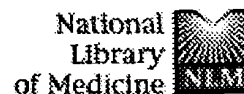
The family of ATP binding cassette (ABC) transporters or traffic ATPases is composed of several membrane-associated proteins that transport a great variety of solutes across cellular membranes. Two novel mammalian members of the family, ABC1 and ABC2, have been identified by a PCR-based approach. They belong to a group of traffic ATPases encoded as a single multifunctional protein, such as CFTR, STE 6, and P-glycoproteins. Their peculiar structural features and close relationship to ABC transporters involved in nodulation suggest that ABC1 and ABC2 define a novel subgroup of mammalian traffic ATPases.

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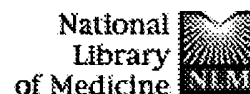
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












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
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
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
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
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
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
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
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
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
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
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
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
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
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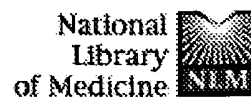
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Broccardo C, Luciani M, Chimini G.

Centre d'Immunologie de Marseille-Luminy, Parc Scientifique de Luminy, 13288, Marseille, France.

We describe here a subclass of mammalian ABC transporters, the ABCA subfamily. This is a unique group that, in contrast to any other human ABC transporters, lacks a structural counterpart in yeast. The structural hallmark of the ABCA subfamily is the presence of a stretch of hydrophobic amino acids thought to span the membrane within the putative regulatory (R) domain. As for today, four ABCA transporters have been fully characterised but 11 ABCA-encoding genes have been identified. ABCA-specific motifs in the nucleotide binding folds can be detected when analysing the conserved sequences among the different members. These motifs may reveal functional constraints exclusive to this group of ABC transporters.

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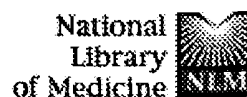
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Cloning, characterization and tissue distribution of the rat ATP-binding cassette (ABC) transporter ABC2/ABCA2.

Zhao LX, Zhou CJ, Tanaka A, Nakata M, Hirabayashi T, Amachi T, Shioda S, Ueda K, Inagaki N.

Department of Physiology, Akita University School of Medicine, 1-1-1, Hondo, Akita 010-8543, Japan.

The ABC1 (ABCA) subfamily of the ATP-binding cassette (ABC) transporter superfamily has a structural feature that distinguishes it from other ABC transporters. Here we report the cloning, molecular characterization and tissue distribution of ABC2/ABCA2, which belongs to the ABC1 subfamily. Rat ABC2 is a protein of 2434 amino acids that has 44.5%, 40.0% and 40.8% identity with mouse ABC1/ABCA1, human ABC3/ABCA3 and human ABCR/ABCA4 respectively. Immunoblot analysis showed that proteins of 260 and 250 kDa were detected in COS-1 cells transfected with ABC2 having a haemagglutinin tag, while no band was detected in mock-transfected cells. After incubation with N-glycosidase F, the mobilities of the two proteins increased and a single band was detected, suggesting that ABC2 is a glycoprotein. Photoaffinity labelling with 8-azido-[alpha-(32)P]ATP confirmed that ATP binds to the ABC2 protein in the presence of Mg(2+). RNA blot analysis showed that ABC2 mRNA is most abundant in rat brain. Examination of brain by in situ hybridization determined that ABC2 is expressed at high levels in the white matter, indicating that it is expressed in the oligodendrocytes. ABC2, therefore, is a glycosylated ABC transporter protein, and may play an especially important role in the brain. In addition, the N-terminal 60-amino-acid sequence of the human ABC1, which was missing from previous reports, has been determined.

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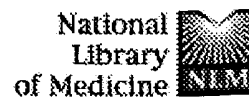
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Department of Physiology, Akita University School of Medicine, 1-1-1, Hondo, Akita 010-8543, Japan.

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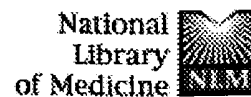
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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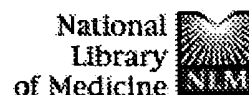
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Identification and characterization of a mammalian mitochondrial ATP-binding cassette membrane protein.

Hogue DL, Liu L, Ling V.

BC Cancer Research Centre, Vancouver, British Columbia, V5Z 4L3, Canada.

Membrane proteins of the ATP-binding cassette (ABC) superfamily are involved in the transport of diverse substrates across organellar and plasma membranes of the mammalian cell. Most human ABC proteins identified to date are associated with genetically linked diseases or clinically relevant phenotypes. We describe a new human half-molecule ABC protein, designated M-ABC1, that contains a predicted single membrane and ATP-binding cassette domain. M-ABC1 is localized to membranes of the mitochondria and its transcript is expressed in all tissues. The N-terminal region of the M-ABC1 protein was shown to function independently as a mitochondrial signal sequence by its ability to target the green fluorescent protein to the mitochondria. The monomeric 60 kDa M-ABC1 protein was chemically crosslinked in vivo into a major protein species of 120-130 kDa, thereby confirming that M-ABC1 exists within a higher ordered ABC protein complex. A dominant negative repression approach using M-ABC1 protein with site-directed mutations in its Walker A motif revealed that the mutant protein was rapidly degraded and indicated that the intact Walker A motif of M-ABC1 was required for its stability. The identification of M-ABC1 extends the known distribution of members of the ABC protein family into the mammalian mitochondrion. Copyright 1999 Academic Press.

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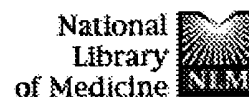
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Identification and characterization of a mammalian mitochondrial ATP-binding cassette membrane protein.

Hogue DL, Liu L, Ling V.

BC Cancer Research Centre, Vancouver, British Columbia, V5Z 4L3, Canada.

Membrane proteins of the ATP-binding cassette (ABC) superfamily are involved in the transport of diverse substrates across organellar and plasma membranes of the mammalian cell. Most human ABC proteins identified to date are associated with genetically linked diseases or clinically relevant phenotypes. We describe a new human half-molecule ABC protein, designated M-ABC1, that contains a predicted single membrane and ATP-binding cassette domain. M-ABC1 is localized to membranes of the mitochondria and its transcript is expressed in all tissues. The N-terminal region of the M-ABC1 protein was shown to function independently as a mitochondrial signal sequence by its ability to target the green fluorescent protein to the mitochondria. The monomeric 60 kDa M-ABC1 protein was chemically crosslinked in vivo into a major protein species of 120-130 kDa, thereby confirming that M-ABC1 exists within a higher ordered ABC protein complex. A dominant negative repression approach using M-ABC1 protein with site-directed mutations in its Walker A motif revealed that the mutant protein was rapidly degraded and indicated that the intact Walker A motif of M-ABC1 was required for its stability. The identification of M-ABC1 extends the known distribution of members of the ABC protein family into the mammalian mitochondrion. Copyright 1999 Academic Press.

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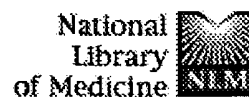
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
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















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
















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
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
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
















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









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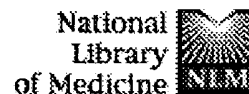
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Polymorphisms of the human homologue of the *Drosophila* white gene are associated with mood and panic disorders.

Nakamura M, Ueno S, Sano A, Tanabe H.

Department of Neuropsychiatry, Ehime University School of Medicine, Onsen-gun, Japan.

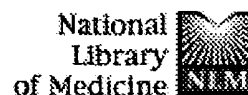
The *Drosophila* white gene is a member of the ATP-binding cassette (ABC) transporter superfamily and is involved in the cellular uptake of tryptophan. Its human homologue gene (hW) has been mapped to chromosome 21q22.3. Tryptophan is the precursor for the neurotransmitter serotonin, which has been implicated in the regulation of mood and anxiety. The locus 21q22.3 has also been reported to be associated with mood disorders. The 3'-untranslated region (3'-UTR) in the hW gene has been shown to contain a polymorphic poly(T) region. We have identified a new polymorphism G2457A in the 3'-UTR in the present study. We examined the relationship between these polymorphisms and mood and panic disorders, and a significant association between the poly(T) polymorphisms and mood disorders was detected ($P=0.039$ (allele frequency)). Associations were found between the polymorphisms and mood (poly(T) polymorphism: $P=0.047$ (allele frequency), G2457A: $P=0.040$ (allele frequency), $P=0.044$ (genotype frequency)) and panic disorders (G2457A: $P=0.026$ (allele frequency), $P=0.011$ (genotype frequency)) in males, but not in females. These findings suggest that the hW gene may be an important gene in the control of mood and anxiety as well as one of the genetic factors related to mood disorders and panic disorder in males. The statistical significance of the association remains relatively low and larger materials facilitating further dissection of the clinical phenotype will be needed to confirm and independently validate this finding and to evaluate its significance.

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
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
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
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
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
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
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
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
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
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













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
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
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
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
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
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
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
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
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
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
















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






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
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
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
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
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
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
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
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


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


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




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
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
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
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
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
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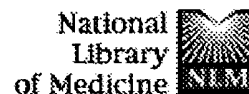
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









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








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
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
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
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
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
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
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
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
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
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





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
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
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
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
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
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









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














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















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
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
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



















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
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
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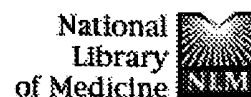
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Rozet JM, Gerber S, Ghazi I, Perrault I, Ducroq D, Souied E, Cabot A, Dufier JL, Munnich A, Kaplan J.

Unite de Recherches sur les Handicaps Genetiques de l'Enfant INSERM U-393, Paris, France.

Stargardt disease (STGD) is an autosomal recessive macular dystrophy of childhood characterised by bilateral loss of central vision over a period of several months. STGD has been mapped to chromosome 1p22.1 and recently ascribed to mutations in the retinal specific ATP binding transporter gene (ABCR). The fundus flavimaculatus with macular dystrophy (FFM), an autosomal recessive condition responsible for gradual loss of visual acuity in adulthood (second to third decade) has also been mapped to the same locus. However, a gene for autosomal recessive retinitis pigmentosa with distinctive features of choriocapillaris atrophy at an advanced stage (RP19) has been mapped to the genetic interval encompassing the STGD gene on chromosome 1p (D1S435-D1S236), raising the question of whether, despite striking differences in clinical course and presentation, RP19 and STGD might be allelic disorders at the ABCR locus. In a family segregating RP and STGD in two first cousins, we found that heterozygosity for a splicing mutation in the ABCR gene (1938-1 G-->A) resulted in STGD while hemizyosity for this splice mutation resulted in RP, and when studying the RP patient's parents, we found a maternal non-contribution with apparent segregation of a null allele ascribed to a partial deletion of the ABCR gene. The present study shows that, despite striking clinical differences, RP19 and STGD are allelic disorders at the ABCR locus.

Publication Types:

- Case Reports

PMID: 10874631 [PubMed - indexed for MEDLINE]

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L3 174 DUP REM L2 (99 DUPLICATES REMOVED)

=> D L3 1-174

L3 ANSWER 1 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:355085 CAPLUS
DN 140:369944
TI Human tissue-specific housekeeping genes identified by expression
profiling
IN Aburatani, Hiroyuki; Yamamoto, Shogo
PA NGK Insulators, Ltd., Japan
SO PCT Int. Appl., 372 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004035785	A1	20040429	WO 2002-JP10753	20021016
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI WO 2002-JP10753 20021016
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 174 USPATFULL on STN
AN 2004:94708 USPATFULL
TI Molecular toxicology modeling
IN Mendrick, Donna, Gaithersburg, MD, UNITED STATES
Porter, Mark, Gaithersburg, MD, UNITED STATES
Johnson, Kory, Gaithersburg, MD, UNITED STATES
Higgs, Brandon, Gaithersburg, MD, UNITED STATES
Castle, Arthur, Gaithersburg, MD, UNITED STATES
Elashoff, Michael, Gaithersburg, MD, UNITED STATES

PI	US 2004072160	A1	20040415
AI	US 2002-152319	A1	20020522 (10)
PRAI	US 2001-292335P		20010522 (60)
	US 2001-297523P		20010613 (60)
	US 2001-298925P		20010619 (60)
	US 2001-303810P		20010710 (60)
	US 2001-303807P		20010710 (60)
	US 2001-303808P		20010710 (60)
	US 2001-315047P		20010828 (60)
	US 2001-324928P		20010927 (60)
	US 2001-330867P		20011101 (60)
	US 2001-330462P		20011022 (60)
	US 2001-331805P		20011121 (60)
	US 2001-336144P		20011206 (60)
	US 2001-340873P		20011219 (60)
	US 2002-357843P		20020221 (60)
	US 2002-357842P		20020221 (60)

US 2002-364134P 20020315 (60)
US 2002-370206P 20020408 (60)
US 2002-370247P 20020408 (60)
US 2002-370144P 20020408 (60)
US 2002-371679P 20020412 (60)
US 2002-372794P 20020417 (60)
DT Utility
FS APPLICATION
LN.CNT 27909
INCL INCLM: 435/006.000
INCLS: 435/091.200; 436/084.000
NCL NCLM: 435/006.000
NCLS: 435/091.200; 436/084.000
IC [7]
ICM: C12Q001-68
ICS: C12P019-34; G01N033-20
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 174 USPATFULL on STN
AN 2004:18738 USPATFULL
TI Cardiotoxin molecular toxicology modeling
IN Mendrick, Donna, Gaithersburg, MD, UNITED STATES
Porter, Mark, Gaithersburg, MD, UNITED STATES
Johnson, Kory, Gaithersburg, MD, UNITED STATES
Higgs, Brandon, Gaithersburg, MD, UNITED STATES
Castle, Arthur, Gaithersburg, MD, UNITED STATES
Elashoff, Michael, Gaithersburg, MD, UNITED STATES
PI US 2004014040 A1 20040122
AI US 2002-191803 A1 20020710 (10)
PRAI US 2001-303819P 20010710 (60)
US 2001-305623P 20010717 (60)
US 2002-369351P 20020403 (60)
US 2002-377611P 20020506 (60)

DT Utility
FS APPLICATION
LN.CNT 15812
INCL INCLM: 435/006.000
INCLS: 702/020.000
NCL NCLM: 435/006.000
NCLS: 702/020.000
IC [7]
ICM: C12Q001-68
ICS: G06F019-00; G01N033-48; G01N033-50
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 2004:462250 CAPLUS
TI Mitoxantrone resistance in a small cell lung cancer cell line is
associated with ***ABCA2*** upregulation
AU Boonstra, R.; Timmer-Bosscha, H.; van Echten-Arends, J.; van der Kolk, D.
M.; van den Berg, A.; de Jong, B.; Tew, K. D.; Poppema, S.; de Vries, E.
G. E.
CS Department of Pathology and Laboratory Medicine, University Hospital
Groningen, Neth.
SO British Journal of Cancer (2004), 90(12), 2411-2417
CODEN: BJCAAI; ISSN: 0007-0920
PB Nature Publishing Group
DT Journal
LA English
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 174 MEDLINE on STN
AN 2004433854 IN-PROCESS
DN PubMed ID: 15340233
TI mRNA Expression of the ATP-Binding Cassette Transporter Subfamily A (ABCA)
in Rat and Human Brain Capillary Endothelial Cells.
AU Ohtsuki Sumio; Watanabe Yuki; Hori Satoko; Suzuki Hiroya; Bhongsatiern
Jiraganya; Fujiyoshi Masachika; Kamoi Mayu; Kamiya Naoko; Takanaga Hitomi;
Terasaki Tetsuya
CS Department of Molecular Biopharmacy and Genetics, Graduate School of
Pharmaceutical Sciences, Tohoku University.
SO Biological & pharmaceutical bulletin, (2004 Sep) 27 (9) 1437-40.
Journal code: 9311984. ISSN: 0918-6158.
CY Japan

LA English
 FS IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
 ED Entered STN: 20040902
 Last Updated on STN: 20040902

L3 ANSWER 6 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
 AN 2004:576743 CAPLUS
 DN 141:87097
 TI Association of ***ABCA2*** expression with determinants of Alzheimer's disease
 AU Chen, Zhijian J.; Vulevic, Bojana; Ile, Kristina E.; Soulika, Athena; Davis, Warren, Jr.; Reiner, Peter B.; Connop, Bruce P.; Nathwan, Parimal; Trojanowski, John Q.; Tew, Kenneth D.
 CS Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA, 19111, USA
 SO FASEB Journal (2004), 18(10), 1129-1131, 10.1096/fj.03-1490fje
 CODEN: FAJOEC; ISSN: 0892-6638
 PB Federation of American Societies for Experimental Biology
 DT Journal
 LA English
 RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:591973 CAPLUS
 DN 141:135720
 TI Tissue-specific expression of ABC transporters involved in lipid transport
 AU Inagaki, Nobuya
 CS Dep. Physiol., Akita Univ. Sch. Med., Akita, 010-8543, Japan
 SO Seikagaku (2004), 76(6), 539-545
 CODEN: SEIKAQ; ISSN: 0037-1017
 PB Nippon Seikagakkai
 DT Journal; General Review
 LA Japanese

L3 ANSWER 8 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3
 AN 2004:333160 BIOSIS
 DN PREV200400336448
 TI Comparative analysis of ATP-binding cassette (ABC) transporter gene expression levels in peripheral blood leukocytes and in liver with hepatocellular carcinoma.
 AU Moustafa, Mohsen A.; Ogino, Daisuke; Nishimura, Masuhiro; Ueda, Nobuhiko; Naito, Shinsaku; Furukawa, Motori; Uchida, Takafumi; Ikai, Iwao; Sawada, Hideki; Fukumoto, Manabu [Reprint Author]
 CS Dept PatholInst Dev Aging and CancAoba Ku, Tohoku Univ, 4-1 Seiryomachi, Sendai, Miyagi, 9808575, Japan
 SO fukumoto@idac.tohoku.ac.jp
 Cancer Science, (June 2004) Vol. 95, No. 6, pp. 530-536. print.
 ISSN: 1347-9032 (ISSN print).
 DT Article
 LA English
 ED Entered STN: 4 Aug 2004
 Last Updated on STN: 4 Aug 2004

L3 ANSWER 9 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:212987 CAPLUS
 DN 141:66135
 TI Annotation of the pRhico plasmid of Azospirillum brasilense reveals its role in determining the outer surface composition
 AU Vanbleu, Els; Marchal, Kathleen; Lambrecht, Mark; Mathys, Janick; Vanderleyden, Jos
 CS Centre of Microbial and Plant Genetics, Katholieke Universiteit Leuven, Heverlee, 3001, Belg.
 SO FEMS Microbiology Letters (2004), 232(2), 165-172
 CODEN: FMLED7; ISSN: 0378-1097
 PB Elsevier Science B.V.
 DT Journal
 LA English
 RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 4
 AN 2004:352699 BIOSIS

TI Human ATP-binding cassette transporter-2 (***ABCA2***) positively
 regulates low-density lipoprotein receptor expression and negatively
 regulates cholesterol esterification in Chinese hamster ovary cells.
 AU Davis, Warren Jr; Boyd, Jonathan T.; Ile, Kristina E.; Tew, Kenneth D.
 [Reprint Author]
 CS Dept Pharmacol, Fox Chase Canc Ctr, Philadelphia, PA, 19111, USA
 KD Tew@fccc.edu
 SO Biochimica et Biophysica Acta, (July 5 2004) Vol. 1683, No. 1-3, pp.
 89-100. print.
 ISSN: 0006-3002 (ISSN print).
 DT Article
 LA English
 ED Entered STN: 26 Aug 2004
 Last Updated on STN: 26 Aug 2004

L3 ANSWER 11 OF 174 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
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 AN 2004278542 EMBASE
 TI Human ATP-binding cassette transporter-2 (***ABCA2***) positively
 regulates low-density lipoprotein receptor expression and negatively
 regulates cholesterol esterification in Chinese hamster ovary cells.
 AU Davis Jr. W.; Boyd J.T.; Ile K.E.; Tew K.D.
 CS K.D. Tew, Department of Pharmacology, Fox Chase Cancer Center,
 Philadelphia, PA 19111, United States. KD Tew@fccc.edu
 SO Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids, (5
 Jul 2004) 1683/1-3 (89-100).
 Refs: 40
 ISSN: 1388-1981 CODEN: BBMLFG
 PUI S 1388-1981(04)00067-8
 CY Netherlands
 DT Journal; Article
 FS 030 Pharmacology
 037 Drug Literature Index
 LA English
 SL English

L3 ANSWER 12 OF 174 JICST-EPlus COPYRIGHT 2004 JST on STN
 AN 1040456781 JICST-EPlus
 TI Expression analysis of the ABC transporter ***ABCA2*** in human
 peripheral nerve
 AU WANG Y; YAMADA K; ISHIKAWA K; INAGAKI N
 CS Sch. Med. Akita Univ., Akita, Jpn
 SO Jpn J Physiol, (2004) vol. 54, no. Supplement, pp. S88. Journal Code:
 Z0753A
 CODEN: JJPHAM; ISSN: 0021-521X
 CY Japan
 DT Journal; Short Communication
 LA English
 STA New

L3 ANSWER 13 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6
 AN 2004:304377 CAPLUS
 DN 140:401127
 TI Identification of a novel first exon of the human ***ABCA2***
 transporter gene encoding a unique N-terminus
 AU Ile, Kristina E.; Davis, Warren; Boyd, Jonathan T.; Soulika, Athena M.;
 Tew, Kenneth D.
 CS Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA,
 19111, USA
 SO Biochimica et Biophysica Acta (2004), 1678(1), 22-32
 CODEN: BBACAQ; ISSN: 0006-3002
 PB Elsevier Science B.V.
 DT Journal
 LA English
 RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 7
 AN 2004:322513 BIOSIS
 DN PREV200400318810
 TI Association of ***ABCA2*** expression with determinants of Alzheimer's
 disease.
 AU Chen, Zhijian J.; Vulevic, Bojana; Ile, Kristina E.; Soulika, Athena;
 Davis, Warren Jr; Reiner, Peter B.; Connop, Bruce P.; Nathwan, Parimal;

CS Dept Pharmacol, Med Univ S Carolina, 173 Ashley Ave, Charleston, SC,
29425, USA
tewk@muscc.edu

SO FASEB Journal, (May 2004) Vol. 18, No. 7. print.
ISSN: 0892-6638 (ISSN print).

DT Article
LA English
ED Entered STN: 21 Jul 2004
Last Updated on STN: 21 Jul 2004

L3 ANSWER 15 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:571232 CAPLUS
DN 139:128012
TI Over-expressed gene markers useful in compositions, kits, and methods for
identification, assessment, prevention, and therapy of rheumatoid
arthritis
IN Guild, Braydon C.; Liao, Hua; Jones, Michael D.; Zolg, Johannes W.; Wu,
Jiang
PA Millennium Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 172 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003060465	A2	20030724	WO 2002-US40271	20021217
	WO 2003060465	A3	20031211		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003224386	A1	20031204	US 2002-320352	20021216
	EP 1454146	A2	20040908	EP 2002-803318	20021217
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRAI	US 2001-341942P	P	20011219		
	WO 2002-US40271	W	20021217		

L3 ANSWER 16 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:6087 CAPLUS
DN 138:84550
TI Human cDNA sequences and their encoded proteins and diagnostic and
therapeutic uses
IN Agee, Michele L.; Anderson, David W.; Berghs, Constance; Casman, Stacie
J.; Catterton, Elina; DiPippo, Vincent A.; Edinger, Shlomit R.; Eisen,
Andrew; Ellerman, Karen; Gangolli, Esha A.; Gerlach, Valerie L.; Gorman,
Linda; Guo, Xiaojia; Herrmann, John L.; Hjalt, Tord; Ji, Weizhen; Kekuda,
Ramesh; Khramtsov, Nikolai V.; Li, Li; Liu, Xiaohong; Malyankar, Uriel M.;
Miller, Charles E.; Millet, Isabelle; Ort, Tatiana; Padigaru, Muralidhara;
Patturajan, Meera; Pena, Carol E. A.; Rastelli, Luca; Rieger, Daniel K.;
Rothenberg, Mark E.; Shenoy, Suresh G.; Shimkets, Richard A.; Smithson,
Glennnda; Spaderna, Steven K.; Spytek, Kimberly A.; Stone, David J.;
Vernet, Corine A. M.; Zhong, Haihong; Zhong, Mei; Alsobrook, John P., II;
Burgess, Catherine E.; Lepley, Denise M.
PA Curagen Corporation, USA
SO PCT Int. Appl., 772 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 141

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003000842	A2	20030103	WO 2002-US17443	20020604
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				

	UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	US 2004009480 A1 20040115	US 2002-162335 20020603
PRAI	US 2001-295607P P 20010604	
	US 2001-295661P P 20010604	
	US 2001-296404P P 20010606	
	US 2001-296418P P 20010606	
	US 2001-296575P P 20010607	
	US 2001-297414P P 20010611	
	US 2001-297567P P 20010612	
	US 2001-297573P P 20010612	
	US 2001-298285P P 20010614	
	US 2001-298528P P 20010615	
	US 2001-299133P P 20010618	
	US 2001-299230P P 20010619	
	US 2001-299949P P 20010621	
	US 2001-300177P P 20010622	
	US 2001-300883P P 20010626	
	US 2001-301530P P 20010628	
	US 2001-301550P P 20010628	
	US 2001-302951P P 20010703	
	US 2001-308890P P 20010731	
	US 2001-322297P P 20010914	
	US 2001-324669P P 20010925	
	US 2001-337477P P 20011203	
	US 2001-341562P P 20011214	
	US 2002-358656P P 20020221	
	US 2002-359122P P 20020221	
	US 2002-358978P P 20020222	
	US 2002-359034P P 20020222	
	US 2002-359035P P 20020222	
	US 2002-359121P P 20020222	
	US 2002-359964P P 20020227	
	US 2002-360858P P 20020301	
	US 2002-363430P P 20020312	
	US 2002-363676P P 20020312	
	US 2002-371346P P 20020410	
	US 2002-379444P P 20020510	
	US 2001-298556P P 20010615	
	US 2001-311972P P 20010813	
	US 2001-315069P P 20010827	
	US 2001-315071P P 20010827	
	US 2001-315660P P 20010829	
	US 2001-322293P P 20010914	
	US 2001-322706P P 20010917	
	US 2001-341186P P 20011214	
	US 2002-361189P P 20020228	
	US 2002-363673P P 20020312	
L3	ANSWER 17 OF 174 USPATFULL on STN	
AN	2003:127034 USPATFULL	
TI	Nucleic acids of the human ABCA12 gene, vectors containing such nucleic acids and uses thereof	
IN	Arnould-Reguigne, Isabelle, Chennevieres Sur Marne, FRANCE	
	Prades, Catherine, Thiais, FRANCE	
	Naudin, Laurent, Etampes, FRANCE	
	Lemoine, Cendrine, Massy, FRANCE	
	Dean, Michael, Frederick, MD, UNITED STATES	
	Denefle, Patrice, Saint Maur, FRANCE	
	Rosier-Montus, Marie-Francoise, Antony, FRANCE	
PI	US 2003087246 A1 20030508	
AI	US 2002-72900 A1 20020212 (10)	
PRAI	US 2001-267715P 20010212 (60)	
DT	Utility	
FS	APPLICATION	
LN.CNT	5723	
INCL	INCLM: 435/006.000	
	INCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 435/091.200; 536/023.500	
NCL	NCLM: 435/006.000	
	NCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 435/091.200; 536/023.500	

ICM: C12Q001-68

ICS: C07H021-04; C12P019-34; C12P021-02; C12N005-06; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 18 OF 174 USPATFULL on STN
AN 2003:112859 USPATFULL
TI Nucleic acid for regulating the ABCA7 gene, molecules modulating its activity and therapeutic applications
IN Denefle, Patrice, Saint Maur, FRANCE
Rosier-Montus, Marie-Francoise, Antony, FRANCE
Prades, Catherine, Thiais, FRANCE
Arnould-Reguigne, Isabelle, Sur Marne, FRANCE
Fortea, Jose Osorio Y, Evry, FRANCE
Duverger, Nicolas, Paris, FRANCE
Chimini, Giovanna, Marseille, FRANCE
PI US 2003077591 A1 20030424
AI US 2001-983446 A1 20011024 (9)
PRAI US 2000-253141P 20001128 (60)
DT Utility
FS APPLICATION
LN.CNT 5162
INCL INCLM: 435/006.000
INCLS: 514/044.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 514/044.000; 536/023.200
IC [7]

ICM: C12Q001-68

ICS: A61K048-00; C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 174 USPATFULL on STN
AN 2003:64774 USPATFULL
TI Nucleic acids of the human ABCA5, ABCA6, ABCA9, AND ABCA10 Genes, vectors containing such nucleic acids, and uses thereof
IN Denefle, Patrice, Saint Maur, FRANCE
Rosier-Montus, Marie-Francoise, Antony, FRANCE
Prades, Catherine, Thiais, FRANCE
Arnould-Reguigne, Isabelle, Chennevieres Sur Marne, FRANCE
Duverger, Nicolas, Paris, FRANCE
Allikmets, Rando, Cornwall-on Hudson, NY, UNITED STATES
Dean, Michael, Frederick, MD, UNITED STATES
PI US 2003044895 A1 20030306
AI US 2001-5338 A1 20011207 (10)
PRAI FR 2000-403440 20001207
US 2001-263231P 20010123 (60)
DT Utility
FS APPLICATION
LN.CNT 7243
INCL INCLM: 435/069.100
INCLS: 435/320.100; 435/006.000; 435/325.000; 530/350.000; 536/023.500
NCL NCLM: 435/069.100
NCLS: 435/320.100; 435/006.000; 435/325.000; 530/350.000; 536/023.500
IC [7]

ICM: C12Q001-68

ICS: C07H021-04; C12P021-02; C12N005-06; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 20 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 8
AN 2003:152689 BIOSIS
DN PREV200300152689
TI Reciprocal regulation of expression of the human adenosine 5'-triphosphate binding cassette, sub-family A, transporter 2 (***ABCA2***) promoter by the early growth response-1 (EGR-1) and Sp-family transcription factors.
AU Davis, Warren Jr.; Chen, Zhijian J.; Ile, Kristina E.; Tew, Kenneth D.
[Reprint Author]
CS Department of Pharmacology, Fox Chase Cancer Center, Philadelphia, PA, 19111, USA
kd_tew@fccc.edu
SO Nucleic Acids Research, (February 1 2003) Vol. 31, No. 3, pp. 1097-1107.
print.
ISSN: 0305-1048 (ISSN print).
DT Article
LA English

Last Updated on STN: 19 Mar 2003

L3 ANSWER 21 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:331608 CAPLUS
DN 139:64124
TI Cloning of rat ABCA7 and its preferential expression in platelets
AU Sasaki, Mari; Shoji, Ayako; Kubo, Yoshiyuki; Nada, Shigeyuki; Yamaguchi, Akihito
CS Institute of Scientific and Industrial Research, Department of Cell Membrane Biology, Osaka University, Ibaraki, Osaka, 567-0047, Japan
SO Biochemical and Biophysical Research Communications (2003), 304(4), 777-782
CODEN: BBRCA9; ISSN: 0006-291X
PB Elsevier Science
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 22 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 9
AN 2003:63605 BIOSIS
DN PREV200300063605
TI Temporal and spatial profiles of ***ABCA2*** -expressing oligodendrocytes in the developing rat brain.
AU Tanaka, Yukiko; Yamada, Katsuya; Zhou, Cheng-Ji; Ban, Nobuhiro; Shioda, Seiji; Inagaki, Nobuya [Reprint Author]
CS Department of Physiology, Akita University School of Medicine, 1-1-1 Hondo, Akita, 010-8543, Japan
inagaki@med.akita-u.ac.jp
SO Journal of Comparative Neurology, (January 13 2003) Vol. 455, No. 3, pp. 353-367. print.
ISSN: 0021-9967 (ISSN print).
DT Article
LA English
ED Entered STN: 22 Jan 2003
Last Updated on STN: 22 Jan 2003

L3 ANSWER 23 OF 174 JICST-Eplus COPYRIGHT 2004 JST on STN
AN 1040141785 JICST-Eplus
TI The ATP-binding cassette (ABC) transporter ***ABCA2*** is associated with sphingolipids/cholesterol-rich Brij 98 rafts
AU ZHAO L-X; BAN N; INAGAKI N
CS Akita Univ. School Of Medicine, Akita, Jpn
SO Jpn J Physiol, (2003) vol. 53, no. Supplement, pp. S156. Journal Code: Z0753A
CODEN: JJPHAM; ISSN: 0021-521X
CY Japan
DT Journal; Short Communication
LA English
STA New

L3 ANSWER 24 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
AN 2003:441800 BIOSIS
DN PREV200300441800
TI Identification of novel first exon of human ***ABCA2*** transporter gene encodes unique N-terminus.
AU Davis, Warren Jr. [Reprint Author]; Ile, Kristina E. [Reprint Author]; Tew, Kenneth D. [Reprint Author]
CS Fox Chase Cancer Center, Philadelphia, PA, USA
SO Proceedings of the American Association for Cancer Research Annual Meeting, (July 2003) Vol. 44, pp. 117. print.
Meeting Info.: 94th Annual Meeting of the American Association for Cancer Research. Washington, DC, USA. July 11-14, 2003.
ISSN: 0197-016X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 24 Sep 2003
Last Updated on STN: 24 Sep 2003

L3 ANSWER 25 OF 174 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP/ISI on STN DUPLICATE 10
AN 2002-10006 BIOTECHDS

ABCA2 of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases; vector-mediated recombinant protein gene transfer and expression in host cell for use in drug screening and Alzheimer disease, prion disease, Huntington chorea and Parkinson disease diagnosis, prevention and therapy

AU INAGAKI N
PA BANYU PHARM CO LTD; INAGAKI N
PI WO 2002008424 31 Jan 2002
AI WO 2000-JP6457 26 Jul 2000
PRAI JP 2000-225462 26 Jul 2000
DT Patent
LA Japanese
OS WPI: 2002-179907 [23]

L3 ANSWER 26 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 11
AN 2002:637828 CAPLUS
DN 137:150263
TI Regulation of amyloid precursor protein expression in the brain cell by modification of ABC transporter expression or activity
IN Reiner, Peter B.; Connop, Bruce P.; Pollard, Michelle
PA Active Pass Pharmaceuticals, Inc., Can.
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064781	A2	20020822	WO 2002-CA138	20020208
	WO 2002064781	A3	20030626		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002169137	A1	20021114	US 2002-72621	20020208
PRAI	US 2001-267975P	P	20010209		
	US 2001-309256P	P	20010731		

L3 ANSWER 27 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 12
AN 2002:107902 CAPLUS
DN 136:161325
TI Flavopiridol drug combinations with glucuronosyltransferase activity enhancer and methods with reduced side effects by enhancing its metabolism
IN Ratain, Mark J.; Innocenti, Federico; Iyer, Lalitha
PA USA
SO U.S. Pat. Appl. Publ., 64 pp., Cont.-in-part of U.S. Ser. No. 553,829.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002016293	A1	20020207	US 2001-835082	20010412
PRAI	US 2000-553829	A2	20000421		

L3 ANSWER 28 OF 174 USPATFULL on STN
AN 2002:337461 USPATFULL
TI Increased functional activity and/or expression of ABC transporters protects against the loss of dopamine neurons associated with Parkinson's disease
IN Reiner, Peter B., Vancouver, CANADA
Roy, Josee, Vancouver, CANADA
Connop, Bruce P., Vancouver, CANADA
PA Active Pass Pharmaceuticals, Inc., Vancouver, CANADA (non-U.S. corporation)
PI US 2002192821 A1 20021219
AI US 2002-154452 A1 20020522 (10)

US 2001-292844P 20010522 (60)

DT Utility
FS APPLICATION
LN.CNT 3355
INCL INCLM: 435/455.000
INCLS: 514/044.000
NCL NCLM: 435/455.000
NCLS: 514/044.000
IC [7]
ICM: A61K048-00
ICS: C12N015-85

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 29 OF 174 USPATFULL on STN
AN 2002:301592 USPATFULL
TI Regulation of amyloid precursor protein expression by modification of
ABC transporter expression or activity
IN Reiner, Peter B., Vancouver, CANADA
Connop, Bruce P., Vancouver, CANADA
Pollard, Michelle, Vancouver, CANADA
PA Active Pass Pharmaceuticals, Inc., Vancouver, CANADA, V5Z 4H5 (non-U.S.
corporation)
PI US 2002169137 A1 20021114
AI US 2002-72621 A1 20020208 (10)
PRAI US 2001-267975P 20010209 (60)
US 2001-309256P 20010731 (60)

DT Utility
FS APPLICATION
LN.CNT 3827
INCL INCLM: 514/044.000
INCLS: 514/002.000
NCL NCLM: 514/044.000
NCLS: 514/002.000
IC [7]
ICM: A61K048-00
ICS: A61K038-17

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 30 OF 174 USPATFULL on STN
AN 2002:186078 USPATFULL
TI Compounds for sustained release of orally delivered drugs
IN Gallop, Mark A., Los Altos, CA, UNITED STATES
Cundy, Kenneth C., Redwood City, CA, UNITED STATES
PI US 2002098999 A1 20020725
AI US 2001-972402 A1 20011005 (9)
PRAI US 2000-238758P 20001006 (60)
US 2000-249804P 20001117 (60)
US 2001-297594P 20010611 (60)
US 2001-297654P 20010611 (60)
US 2001-297641P 20010611 (60)

DT Utility
FS APPLICATION
LN.CNT 4303
INCL INCLM: 514/001.000
NCL NCLM: 514/001.000
IC [7]
ICM: A61K031-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 31 OF 174 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:519282 CAPLUS
DN 137:307883
TI Deciphering peripheral nerve myelination by using Schwann cell expression
profiling
AU Nagarajan, Rakesh; Le, Nam; Mahoney, Heather; Araki, Toshiyuki; Milbrandt,
Jeffrey
CS Departments of Pathology and Internal Medicine, Washington University
School of Medicine, St. Louis, MO, 63110, USA
SO Proceedings of the National Academy of Sciences of the United States of
America (2002), 99(13), 8998-9003
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

L3 ANSWER 32 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 13
 AN 2003:71905 BIOSIS
 DN PREV200300071905
 TI Rapid quantification of murine ABC mRNAs by real time reverse
 transcriptase-polymerase chain reaction.
 AU Su, Yan Ru [Reprint Author]; Linton, MacRae F. [Reprint Author]; Fazio,
 Sergio [Reprint Author]
 CS Atherosclerosis Research Unit, Division of Cardiology, Department of
 Medicine, Vanderbilt University Medical Center, 2220 Pierce Avenue, 383
 Preston Research Building, Nashville, TN, 37232-6300, USA
 yan.ru.su@vanderbilt.edu; macrae.linton@vanderbilt.edu;
 sergio.fazio@vanderbilt.edu
 SO Journal of Lipid Research, (December 2002) Vol. 43, No. 12, pp. 2180-2187.
 print.
 CODEN: JLPRAW. ISSN: 0022-2275.
 DT Article
 LA English
 ED Entered STN: 29 Jan 2003
 Last Updated on STN: 29 Jan 2003

L3 ANSWER 33 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 14
 AN 2003:901 BIOSIS
 DN PREV200300000901
 TI ***ABCA2*** : A candidate regulator of neural transmembrane lipid
 transport.
 AU Schmitz, G. [Reprint Author]; Kaminski, W. E.
 CS Institute for Clinical Chemistry and Laboratory Medicine, University of
 Regensburg, Franz-Josef-Strauss-Allee 11, 93042, Regensburg, Germany
 gerd.schmitz@klinik.uni-regensburg.de
 SO CMLS Cellular and Molecular Life Sciences, (August 2002) Vol. 59, No. 8,
 pp. 1285-1295. print.
 ISSN: 1420-682X.
 DT Article
 LA English
 ED Entered STN: 18 Dec 2002
 Last Updated on STN: 18 Dec 2002

L3 ANSWER 34 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN
 AN 2002:396249 BIOSIS
 DN PREV200200396249
 TI ***ABCA2*** transporter upregulation in mitoxantrone resistant
 GLC4-MITO cell line.
 AU Boonstra, R. [Reprint author]; Timmer-Bosscha, H.; van Echten-Arends, J.;
 van der Kolk, D. M.; van den Berg, A.; de Jong, B.; Poppema, S.; Tew, K.
 D.; de Vries, E. G. E.
 CS University Hospital Groningen, Groningen, Netherlands
 SO Proceedings of the American Association for Cancer Research Annual
 Meeting, (March, 2002) Vol. 43, pp. 779. print.
 Meeting Info.: 93rd Annual Meeting of the American Association for Cancer
 Research. San Francisco, California, USA. April 06-10, 2002.
 ISSN: 0197-016X.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 24 Jul 2002
 Last Updated on STN: 24 Jul 2002

L3 ANSWER 35 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN
 AN 2002:408807 BIOSIS
 DN PREV200200408807
 TI SP-family and EGR-1 transcription factors regulate expression of the human
 ABCA2 promoter.
 AU Davis, Warren, Jr. [Reprint author]; Chen, Zhijian J. [Reprint author];
 Tew, Kenneth D. [Reprint author]
 CS Fox Chase Cancer Center, Philadelphia, PA, USA
 SO Proceedings of the American Association for Cancer Research Annual
 Meeting, (March, 2002) Vol. 43, pp. 510. print.
 Meeting Info.: 93rd Annual Meeting of the American Association for Cancer
 Research. San Francisco, California, USA. April 06-10, 2002.
 ISSN: 0197-016X.

Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 31 Jul 2002
 Last Updated on STN: 23 Sep 2002

L3 ANSWER 36 OF 174 LIFESCI COPYRIGHT 2004 CSA on STN DUPLICATE 15
 AN 2003:77887 LIFESCI
 TI Temporal and Spatial Profiles of ***ABCA2*** -Expressing
 Oligodendrocytes in the Developing Rat Brain
 AU Tanaka, Y.; Yamada, K.; Zhou, C.-J.; Ban, N.; Shioda, S.; Inagaki, N.
 CS Department of Physiology, Akita University School of Medicine, 1-1-1
 Hondo, Akita 010-8543, Japan; E-mail: inagaki@med.akita-u.ac.jp
 SO Journal of Comparative Neurology [J. Comp. Neurol.], (20021125) vol. 455,
 no. 3, pp. 353-367.
 ISSN: 0021-9967.
 DT Journal
 FS N3
 LA English
 SL English

L3 ANSWER 37 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN DUPLICATE 16
 AN 2002:507063 BIOSIS
 DN PREV200200507063
 TI ATP-binding cassette transporter ***ABCA2*** (ABC2) expression in the
 developing spinal cord and PNS during myelination.
 AU Zhou, Cheng-Ji [Reprint author]; Inagaki, Nobuya; Pleasure, Samuel J.;
 Zhao, Li-Xia; Kikuyama, Sakae; Shioda, Seiji
 CS Department of Neurology, UCSF, 513 Parnassus Avenue, Room S-262, Box 0435,
 San Francisco, CA, 94143, USA
 zhoucj@itsa.ucsf.edu; inagaki@med.akita-u.ac.jp; shioda@med.showa-u.ac.jp
 SO Journal of Comparative Neurology, (September 30, 2002) Vol. 451, No. 4,
 pp. 334-345. print.
 CODEN: JCNEAM. ISSN: 0021-9967.
 DT Article
 LA English
 ED Entered STN: 25 Sep 2002
 Last Updated on STN: 25 Sep 2002

L3 ANSWER 38 OF 174 LIFESCI COPYRIGHT 2004 CSA on STN
 AN 2002:29755 LIFESCI
 TI Multidrug resistance in cancer: Role of atp-dependent transporters
 AU Gottesman, M.M.; Fojo, T.; Bates, S.E.
 SO Nature Reviews: Cancer [Nat. Rev. Cancer], (20020100) vol. 2, no. 1, pp.
 48-58.
 ISSN: 1474-175X.
 DT Journal
 TC General Review
 FS B
 LA English
 SL English

L3 ANSWER 39 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
 STN
 AN 2003:324630 BIOSIS
 DN PREV200300324630
 TI EXPRESSION OF ABCA TRANSPORTER AT RAT AND HUMAN BLOOD - BRAIN BARRIER.
 AU Ohtsuki, S. [Reprint Author]; Watanabe, Y. [Reprint Author]; Kamoi, M.
 [Reprint Author]; Kamiya, N. [Reprint Author]; Hori, S. [Reprint Author];
 Terasaki, T. [Reprint Author]
 CS Grad. Sch. of Pharm. Sci., NiChe, Tohoku Univ., Sendai, Japan
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 580.18. <http://sfn.scholarone.com>. cd-rom.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 16 Jul 2003
 Last Updated on STN: 16 Jul 2003

L3 ANSWER 40 OF 174 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP/ISI on STN
 DUPLICATE 17
 AN 2001-08824 BIOTECHDS

mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites;

involving retro virus vector, plasmid pCR-XL-TOPO-mediated gene transfer for expression in bacterium, fungus, mammal, insect or plant cell

AU Tew K D; Vulevic B; Chen Z
PA Fox-Chase-Cancer-Cent.
LO Philadelphia, PA, USA.
PI WO 2001021798 29 Mar 2001
AI WO 2000-US40789 31 Aug 2000
PRAI US 1999-154839 20 Sep 1999
DT Patent
LA English
OS WPI: 2001-257989 [26]

L3 ANSWER 41 OF 174 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2002-075093 [10] WPIDS
CR 2002-239227 [24]
DNC C2002-022326

TI Combinations of flavopiridol and an agent that increases conjugative enzyme activity or glucuronosyltransferase activity, with reduced side effects, for treating cancer.

DC B05 D16
IN INNOCENTI, F; IYER, L; RATAIN, M J
PA (ARCH-N) ARCH DEV CORP
CYC 95

PI WO 2001080896 A2 20011101 (200210)* EN 145 A61K045-06
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD
SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001053618 A 20011107 (200219) A61K045-06
ADT WO 2001080896 A2 WO 2001-US12526 20010412; AU 2001053618 A AU 2001-53618 20010412
FDT AU 2001053618 A Based on WO 2001080896
PRAI US 2000-553829 20000421
IC ICM A61K045-06
ICS A61K031-445

L3 ANSWER 42 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 18
AN 2001:232542 BIOSIS
DN PREV200100232542
TI Cloning and characterization of human adenosine 5'-triphosphate-binding cassette, sub-family A, transporter 2 (***ABCA2***).
AU Vulevic, Bojana; Chen, Zhijian; Boyd, Jonathan T.; Davis, Warren, Jr.; Walsh, Eileen S.; Belinsky, Martin G.; Tew, Kenneth D. [Reprint author]
CS Department of Pharmacology, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA, 19111, USA
kd tew@fccc.edu
SO Cancer Research, (April 15, 2001) Vol. 61, No. 8, pp. 3339-3347. print. CODEN: CNREA8. ISSN: 0008-5472.
DT Article
LA English
ED Entered STN: 16 May 2001
Last Updated on STN: 19 Feb 2002

L3 ANSWER 43 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 19
AN 2001:420739 BIOSIS
DN PREV200100420739
TI ABCA6, a novel A subclass ABC transporter.
AU Kaminski, Wolfgang E.; Wenzel, Juergen J.; Piehler, Armin; Langmann, Thomas; Schmitz, Gerd [Reprint author]
CS Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, Franz-Josef-Strauss-Allee 11, 93042, Regensburg, Germany
gerd.schmitz@klinik.uni-regensburg.de
SO Biochemical and Biophysical Research Communications, (August 3, 2001) Vol. 285, No. 5, pp. 1295-1301. print. CODEN: BBRCA9. ISSN: 0006-291X.
DT Article
LA English

ED Entered STN: 5 Sep 2001
Last Updated on STN: 22 Feb 2002

L3 ANSWER 44 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 2001:498309 BIOSIS
DN PREV200100498309
TI Immunohistochemical evidence for involvement of rat ***ABCA2*** /ABC2
in myelination.
AU Zhou, C. J. [Reprint author]; Inagaki, N.; Zhao, L. X.; Pleasure, S. J.
[Reprint author]; Shioda, S.
CS Dept Neurology, UCSF Sch Med, San Francisco, CA, USA
SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 1, pp. 938. print.
Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
Diego, California, USA. November 10-15, 2001.
ISSN: 0190-5295.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 24 Oct 2001
Last Updated on STN: 23 Feb 2002

L3 ANSWER 45 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 20
AN 2001:109924 BIOSIS
DN PREV200100109924
TI ATP-binding cassette transporter ABC2/ ***ABCA2*** in the rat brain: A
novel mammalian lysosome-associated membrane protein and a specific marker
for oligodendrocytes but not for myelin sheaths.
AU Zhou, Cheng-Ji; Zhao, Li-Xia; Inagaki, Nobuya; Guan, Jian-Lian; Nakajo,
Shigeo; Hirabayashi, Takahiro; Kikuyama, Sakae; Shioda, Seiji [Reprint
author]
CS Department of Anatomy, Showa University School of Medicine, Tokyo,
142-8555, Japan
shioda@med.showa-u.ac.jp
SO Journal of Neuroscience, (February 1, 2001) Vol. 21, No. 3, pp. 849-857.
print.
CODEN: JNRSDS. ISSN: 0270-6474.
DT Article
LA English
ED Entered STN: 28 Feb 2001
Last Updated on STN: 15 Feb 2002

L3 ANSWER 46 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 2002:1572 BIOSIS
DN PREV200200001572
TI Regulation of expression of the ***ABCA2*** transporter gene, a
candidate for acquired cellular resistance to the anticancer drug
estramustine.
AU Davis, Warren [Reprint author]; Vulevic, Bojana I. [Reprint author]; Chen,
Zhijian J. [Reprint author]; Tew, Kenneth D. [Reprint author]
CS Fox Chase Cancer Center, Philadelphia, PA, USA
SO Proceedings of the American Association for Cancer Research Annual
Meeting, (March, 2001) Vol. 42, pp. 784. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer
Research. New Orleans, LA, USA. March 24-28, 2001.
ISSN: 0197-016X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 28 Dec 2001
Last Updated on STN: 25 Feb 2002

L3 ANSWER 47 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 2001:467680 BIOSIS
DN PREV200100467680
TI Subcellular localization and tissue distribution of ***ABCA2***
AU Vulevic, Bojana I. [Reprint author]; Boyd, Jonathan T. [Reprint author];
Tew, Kenneth D. [Reprint author]
CS Fox Chase Cancer Center, Philadelphia, PA, USA
SO Proceedings of the American Association for Cancer Research Annual
Meeting, (March, 2001) Vol. 42, pp. 279-280. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer

ISSN: 0197-016X.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 3 Oct 2001
Last Updated on STN: 23 Feb 2002

L3 ANSWER 48 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 21
AN 2001:174584 BIOSIS
DN PREV200100174584
TI Complete coding sequence, promoter region, and genomic structure of the
human ***ABCA2*** gene and evidence for sterol-dependent regulation in
macrophages.
AU Kaminski, Wolfgang E.; Piehler, Armin; Puellmann, Kerstin;
Porsch-Oezcuernomez, Mustafa; Duong, Chinh; Bared, Guido Maa; Buechler,
Christa; Schmitz, Gerd [Reprint author]
CS Institute for Clinical Chemistry and Laboratory Medicine, University of
Regensburg, Franz-Josef-Strauss-Allee 11, D-93042, Regensburg, Germany
gerd.schmitz@klinik.uni-regensburg.de
SO Biochemical and Biophysical Research Communications, (February 16, 2001)
Vol. 281, No. 1, pp. 249-258. print.
CODEN: BBRCA9. ISSN: 0006-291X.
DT Article
LA English
OS Genbank-AF327657
ED Entered STN: 11 Apr 2001
Last Updated on STN: 19 Feb 2002

L3 ANSWER 49 OF 174 JICST-EPlus COPYRIGHT 2004 JST on STN
AN 1010478383 JICST-EPlus
TI ATP-binding cassette transporter ABC2/ ***ABCA2*** localized
specifically in oligodendrocytes in the rat brain and associated to
lysosomes.
AU ZHOU C-J; GUAN J-L; SHIODA S
ZHAO L-X; IANGAKI N
NAKAJO S; HIRABAYASHI T
KIKUYAMA S
CS Showa Univ. School Of Medicine
Akita Univ. School Of Medicine, Akita, Jpn
Showa Univ. School Of Pharmaceutical Sci., Tokyo, Jpn
Waseda Univ. School Of Education, Tokyo, Jpn
SO Kaibogaku Zasshi (Acta Anatomica Nipponica), (2001) vol. 76, no. 1, pp.
142. Journal Code: Z0654A
ISSN: 0022-7722
CY Japan
LA English
STA New

L3 ANSWER 50 OF 174 JICST-EPlus COPYRIGHT 2004 JST on STN
AN 1020064212 JICST-EPlus
TI Isolation of the ABC2 protein which express specifically in
oligodendrocyte. (Ministry of Health, Labour and Welfare S).
AU INAGAKI NOBUYA
SHIODA SEIJI
CS Akitadai I Seirigakudaiichi
Showadai I Kaibougaku
SO Fukujin Hakushitsu Jisutorofi no Chiryoho Kaihatsu no tameno Rinshoteki
oyobi Kisoteki Kenkyuhan. Heisei 12 Nendo Kenkyu Hokokusho (Annual Report
of Research Project for Development of Therapeutic Strategies for
Adrenoleukodystrophy), (2001) pp. 38. Journal Code: N20012525
CY Japan
DT Journal; Article
LA Japanese
STA New

L3 ANSWER 51 OF 174 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN DUPLICATE 22
AN 2000:490542 BIOSIS
DN PREV200000490663
TI Cloning, characterization and tissue distribution of the rat ATP-binding
cassette (ABC) transporter ABC2/ ***ABCA2***
AU Zhao, Li-Xia; Zhou, Cheng-Ji; Tanaka, Arowu; Nakata, Masanori;
Hirabayashi, Takahiro; Amachi, Teruo; Shioda, Seiji; Ueda, Kazumitsu;
Inagaki, Nobuya [Reprint author]

SO Hondo, Akita, 010-8543, Japan
Biochemical Journal, (15 September, 2000) Vol. 350, No. 3, pp. 865-872.
print.
ISSN: 0264-6021.
DT Article
LA English
OS Genbank-AB037924; EMBL-AB037924; DDBJ-AB037924; Genbank-AB037937;
EMBL-AB037937; DDBJ-AB037937
ED Entered STN: 15 Nov 2000
Last Updated on STN: 10 Jan 2002

L3 ANSWER 52 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ADK15822 protein DGENE
TI New purified human ATP-binding cassette transporter13 (ABCA13) protein,
useful for diagnosing or treating diseases with aberrant activity of
ABCA13, such as hypercholesterolemia, retinal degeneration and
neurological diseases.
IN Dean M C; Arnould-Reguigne I; Prades C; Rosier-Montus M; Denefle P;
Shulenin S; Annilo T; Triunfol M L
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
(AVET) AVENTIS PHARMA SA.
PI WO 2004018633 A2 20040304 328p
AI WO 2003-US26335 20030819
PRAI US 2002-405006P 20020820
US 2003-454502P 20030312
DT Patent
LA English
OS 2004-248070 [23]
DESC Human ***ABCA2*** N-terminal peptide fragment SEQ ID NO:31.

L3 ANSWER 53 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABB98349 Protein DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in
preventing or treating neurological disease, e.g. Alzheimer's disease,
comprises regulating the expression or activity of an ATP-binding
cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR N-PSDB: ABV74352
DESC Human ABC transporter ABCG1 SEQ ID NO 10.

L3 ANSWER 54 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABB98348 Protein DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in
preventing or treating neurological disease, e.g. Alzheimer's disease,
comprises regulating the expression or activity of an ATP-binding
cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR N-PSDB: ABV74351
DESC Human ABC transporter ABCG4 SEQ ID NO 9.

L3 ANSWER 55 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABB98347 Protein DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in
preventing or treating neurological disease, e.g. Alzheimer's disease,
comprises regulating the expression or activity of an ATP-binding
cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p

PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent
 LA English
 OS 2002-667006 [71]
 CR N-PSDB: ABV74350
 DESC Human ABC transporter ***ABCA2*** SEQ ID NO 8.

L3 ANSWER 56 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB98346 Protein DGENE
 TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
 IN Reiner P B; Connop B P; Pollard M
 PA (ACTI-N) ACTIVE PASS PHARM INC.
 PI WO 2002064781 A2 20020822 78p
 AI WO 2002-CA138 20020208
 PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent
 LA English
 OS 2002-667006 [71]
 CR N-PSDB: ABV74349
 DESC Human ABC transporter ABCB1 SEQ ID NO 7.

L3 ANSWER 57 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB98345 Protein DGENE
 TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
 IN Reiner P B; Connop B P; Pollard M
 PA (ACTI-N) ACTIVE PASS PHARM INC.
 PI WO 2002064781 A2 20020822 78p
 AI WO 2002-CA138 20020208
 PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent
 LA English
 OS 2002-667006 [71]
 CR N-PSDB: ABV74348
 DESC Human ABC transporter ABCB9 SEQ ID NO 6.

L3 ANSWER 58 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABP52093 Protein DGENE
 TI Modulating activity of ATP-binding cassette (ABC) transporters by influencing dimerization of nucleotide binding domains through use of D loop sequence of an ABC transporter, or its antisense peptide or peptide mimetic -
 PA (UYGE-N) UNIV GENT.
 PI EP 1217066 A1 20020626 290p
 AI EP 2000-870316 20001221
 PRAI EP 2000-870316 20001221
 DT Patent
 LA English
 OS 2002-550404 [59]
 DESC Homo sapiens ABC transporter ***ABCA2*** protein SEQ ID NO:45.

L3 ANSWER 59 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB76716 Protein DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene ***ABCA2*** of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR N-PSDB: ABL53011

L3 ANSWER 60 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABB76715 Protein DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR N-PSDB: ABL53009
 DESC Human ATP binding cassette transporter protein, ***ABCA2*** .

L3 ANSWER 61 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAB62210 Protein DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 CR N-PSDB: AAF57452
 DESC Human ***ABCA2*** transporter protein.

L3 ANSWER 62 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ADL71166 DNA DGENE
 TI Novel primer set useful for detecting expression of ABC transporter gene
 by polymerase chain reaction.
 PA (RIKO-N) ZH RIKOGAKU SHINKOKAI.
 PI JP 2004008084 A 20040115 32p
 AI JP 2002-165863 20020606
 PRAI JP 2002-165863 20020606
 DT Patent
 LA Japanese
 OS 2004-102882 [11]
 DESC PCR primer 2 used to amplify human ABC transporter ***ABCA2*** cDNA.

L3 ANSWER 63 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ADL71165 DNA DGENE
 TI Novel primer set useful for detecting expression of ABC transporter gene
 by polymerase chain reaction.
 PA (RIKO-N) ZH RIKOGAKU SHINKOKAI.
 PI JP 2004008084 A 20040115 32p
 AI JP 2002-165863 20020606
 PRAI JP 2002-165863 20020606
 DT Patent
 LA Japanese
 OS 2004-102882 [11]
 DESC PCR primer 1 used to amplify human ABC transporter ***ABCA2*** cDNA.

L3 ANSWER 64 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABV74352 DNA DGENE
 TI Regulating expression of amyloid precursor protein in a cell, useful in
 preventing or treating neurological disease, e.g. Alzheimer's disease,
 comprises regulating the expression or activity of an ATP-binding
 cassette transporter -
 IN Reiner P B; Connop B P; Pollard M
 PA (ACTI-N) ACTIVE PASS PHARM INC.
 PI WO 2002064781 A2 20020822 78p
 AI WO 2002-CA138 20020208
 PRAI US 2001-267975P 20010209
 US 2001-309256P 20010731
 DT Patent

OS 2002-667006 [71]
CR P-PSDB: ABB98349
DESC Human ABC transporter ABCG1 encoding polynucleotide SEQ ID NO 5.

L3 ANSWER 65 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74351 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98348
DESC Human ABC transporter ABCG4 encoding polynucleotide SEQ ID NO 4.

L3 ANSWER 66 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74350 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98347
DESC Human ABC transporter ***ABCA2*** encoding polynucleotide SEQ ID NO 3.

L3 ANSWER 67 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74349 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98346
DESC Human ABC transporter ABCB1 encoding polynucleotide SEQ ID NO 2.

L3 ANSWER 68 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABV74348 DNA DGENE
TI Regulating expression of amyloid precursor protein in a cell, useful in preventing or treating neurological disease, e.g. Alzheimer's disease, comprises regulating the expression or activity of an ATP-binding cassette transporter -
IN Reiner P B; Connop B P; Pollard M
PA (ACTI-N) ACTIVE PASS PHARM INC.
PI WO 2002064781 A2 20020822 78p
AI WO 2002-CA138 20020208
PRAI US 2001-267975P 20010209
US 2001-309256P 20010731
DT Patent
LA English
OS 2002-667006 [71]
CR P-PSDB: ABB98345

L3 ANSWER 69 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAL40529 DNA DGENE
 TI Simultaneous determination of a number of different molecular species of protein mRNAs and a kit for the determination composed of primers and probes -
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 PI JP 2002181818 A 20020626 23p
 AI JP 2000-381621 20001215
 PRAI JP 2000-381621 20001215
 DT Patent
 LA Japanese
 OS 2002-543426 [58]
 DESC Human ***ABCA2*** gene region SEQ ID No 6.

L3 ANSWER 70 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAL40528 DNA DGENE
 TI Simultaneous determination of a number of different molecular species of protein mRNAs and a kit for the determination composed of primers and probes -
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 PI JP 2002181818 A 20020626 23p
 AI JP 2000-381621 20001215
 PRAI JP 2000-381621 20001215
 DT Patent
 LA Japanese
 OS 2002-543426 [58]
 DESC Human ***ABCA2*** gene region SEQ ID No 5.

L3 ANSWER 71 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAL40527 DNA DGENE
 TI Simultaneous determination of a number of different molecular species of protein mRNAs and a kit for the determination composed of primers and probes -
 PA (SAKA) OTSUKA SEIYAKU KOGYO KK.
 PI JP 2002181818 A 20020626 23p
 AI JP 2000-381621 20001215
 PRAI JP 2000-381621 20001215
 DT Patent
 LA Japanese
 OS 2002-543426 [58]
 DESC Human ***ABCA2*** gene region SEQ ID No 4.

L3 ANSWER 72 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53016 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene ***ABCA2*** of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 DESC Human ATP binding cassette transporter protein, ABCA1, PCR primer #2.

L3 ANSWER 73 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53015 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene ***ABCA2*** of human or rat origin and encoded protein, useful for screening inhibitors, promoters and regulators of ***ABCA2*** activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]

L3 ANSWER 74 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53014 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 DESC Rat ATP binding cassette transporter protein, ***ABCA2*** , PCR primer
 #2.

L3 ANSWER 75 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53013 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 DESC Rat ATP binding cassette transporter protein, ***ABCA2*** , PCR primer
 #1.

L3 ANSWER 76 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53011 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR P-PSDB: ABB76716
 DESC Rat ATP binding cassette transporter protein, ***ABCA2*** , coding
 sequence.

L3 ANSWER 77 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN ABL53009 DNA DGENE
 TI Adenosine triphosphate (ATP) binding cassette transporter gene
 ABCA2 of human or rat origin and encoded protein, useful for
 screening inhibitors, promoters and regulators of ***ABCA2***
 activity as drugs and diagnosis of ***ABCA2*** -related diseases -
 IN Inagaki N
 PA (BANY) BANYU PHARM CO LTD.
 (INAG-I) INAGAKI N.
 PI WO 2002008424 A1 20020131 118p
 AI WO 2001-JP6457 20010726
 PRAI JP 2000-225462 20000726
 DT Patent
 LA Japanese
 OS 2002-179907 [23]
 CR P-PSDB: ABB76715
 DESC Human ATP binding cassette transporter protein, ***ABCA2*** , coding
 sequence.

AN AAF57477 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Reverse primer for amplifying a probe for ***ABCA2*** cDNA.

L3 ANSWER 79 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57476 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Forward primer for amplifying a probe for ***ABCA2*** cDNA.

L3 ANSWER 80 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57475 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Gene-specific antisense primer for 5' RACE of ***ABCA2*** transcript.

L3 ANSWER 81 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57474 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Universal amplification primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 82 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57473 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent

OS 2001-257989 [26]
DESC Gene-specific antisense primer for 5' RACE of ***ABCA2*** transcript.

L3 ANSWER 83 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57472 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC 5' RACE anchor primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 84 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57471 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC Antisense gene specific primer for 5' RACE of ***ABCA2*** transcript.

L3 ANSWER 85 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57470 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC Primer for constructing pEGFP- ***ABCA2*** clone.

L3 ANSWER 86 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57469 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.
PI WO 2001021798 A2 20010329 68p
AI WO 2000-US40789 20000831
PRAI US 1999-154839 19990920
DT Patent
LA English
OS 2001-257989 [26]
DESC Primer for constructing pEGFP- ***ABCA2*** clone.

L3 ANSWER 87 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAF57468 DNA DGENE
TI New nucleic acid molecule for screening inhibitors of human ***ABCA2*** mediated transport, encoding a human ***ABCA2*** transporter protein with a multi-domain structure including glycosylation and phosphorylation sites -
IN Tew K D; Vulevic B; Chen Z
PA (FOXC-N) FOX CHASE CANCER CENT.

AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 88 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57467 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 89 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57466 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 90 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57465 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 91 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57464 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 92 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57463 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein

sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for assembly of full-length ***ABCA2*** cDNA.

L3 ANSWER 93 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57462 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 3' RACE forward primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 94 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57461 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 3' RACE forward primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 95 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57460 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Neasted ***ABCA2*** primer used for isolation of ***ABCA2***
 cDNA.

L3 ANSWER 96 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57459 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Primer used for isolation of ***ABCA2*** cDNA.

L3 ANSWER 97 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57458 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 5' RACE reverse primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 98 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57457 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC 5' RACE reverse primer for isolation of ***ABCA2*** cDNA.

L3 ANSWER 99 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57456 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC ***ABCA2*** specific forward primer for isolation of human
 ABCA2 cDNA.

L3 ANSWER 100 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57455 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Adapter primer AP2 for isolation of human ***ABCA2*** cDNA.

L3 ANSWER 101 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57454 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -
 IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831

DT Patent
 LA English
 OS 2001-257989 [26]
 DESC ***ABCA2*** specific reverse primer for isolation of human
 ABCA2 cDNA.

L3 ANSWER 102 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57453 DNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 DESC Adapter primer AP1 for isolation of human ***ABCA2*** cDNA.

L3 ANSWER 103 OF 174 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
 AN AAF57452 cDNA DGENE
 TI New nucleic acid molecule for screening inhibitors of human ***ABCA2***
 mediated transport, encoding a human ***ABCA2*** transporter protein
 with a multi-domain structure including glycosylation and phosphorylation
 sites -

IN Tew K D; Vulevic B; Chen Z
 PA (FOXC-N) FOX CHASE CANCER CENT.
 PI WO 2001021798 A2 20010329 68p
 AI WO 2000-US40789 20000831
 PRAI US 1999-154839 19990920
 DT Patent
 LA English
 OS 2001-257989 [26]
 CR P-PSDB: AAB62210
 DESC Human ***ABCA2*** transporter protein encoding cDNA.

L3 ANSWER 104 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BC064542 GenBank (R)
 GenBank ACC. NO. (GBN): BC064542
 GenBank VERSION (VER): BC064542.1 GI:40555859
 CAS REGISTRY NO. (RN): 634865-83-1
 SEQUENCE LENGTH (SQL): 1986
 MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 13 Jan 2004
 DEFINITION (DEF): Homo sapiens ATP-binding cassette, sub-family A (ABC1),
 member 2, mRNA (cDNA clone IMAGE:5734084), partial cds.
 SOURCE: Homo sapiens (human)
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

COMMENT:

Contact: MGC help desk
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Invitrogen
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: National Institutes of Health Intramural
 Sequencing Center (NISC),
 Gaithersburg, Maryland;
 Web site: <http://www.nisc.nih.gov/>
 Contact: nisc_mgc@nhgri.nih.gov
 Akhter, N., Ayale, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
 Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
 Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P.,
 Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R.,
 Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C.,
 McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W.,
 Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L.,
 Young, A., Zhang, L.-H. and Green, E.D.

through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
 Series: IRAK Plate: 139 Row: i Column: 6
 This clone was selected for full length sequencing because it
 passed the following selection criteria: matched mRNA gi: 15451835.

REFERENCE: 1 (bases 1 to 1986)
 AUTHOR (AU): Strausberg, R.L.; Feingold, E.A.; Grouse, L.H.;
 Derge, J.G.; Klausner, R.D.; Collins, F.S.; Wagner, L.;
 Shenmen, C.M.; Schuler, G.D.; Altschul, S.F.; Zeeberg, B.;
 Buetow, K.H.; Schaefer, C.F.; Bhat, N.K.; Hopkins, R.F.;
 Jordan, H.; Moore, T.; Max, S.I.; Wang, J.; Hsieh, F.;
 Diatchenko, L.; Marusina, K.; Farmer, A.A.; Rubin, G.M.;
 Hong, L.; Stapleton, M.; Soares, M.B.; Bonaldo, M.F.;
 Casavant, T.L.; Scheetz, T.E.; Brownstein, M.J.;
 Usdin, T.B.; Toshiyuki, S.; Carninci, P.; Prange, C.;
 Raha, S.S.; Loquellano, N.A.; Peters, G.J.; Abramson, R.D.;
 Mullahy, S.J.; Bosak, S.A.; McEwan, P.J.; McKernan, K.J.;
 Malek, J.A.; Gunaratne, P.H.; Richards, S.; Worley, K.C.;
 Hale, S.; Garcia, A.M.; Gay, L.J.; Hulyk, S.W.;
 Villalon, D.K.; Muzny, D.M.; Sodergren, E.J.; Lu, X.;
 Gibbs, R.A.; Fahey, J.; Helton, E.; Kettelman, M.; Madan, A.;
 Rodrigues, S.; Sanchez, A.; Whiting, M.; Madan, A.;
 Young, A.C.; Shevchenko, Y.; Bouffard, G.G.;
 Blakesley, R.W.; Touchman, J.W.; Green, E.D.;
 Dickson, M.C.; Rodriguez, A.C.; Grimwood, J.; Schmutz, J.;
 Myers, R.M.; Butterfield, Y.S.; Krzywinski, M.I.;
 Skalska, U.; Smailus, D.E.; Schnerch, A.; Schein, J.E.;
 Jones, S.J.; Marra, M.A.
 TITLE (TI): Generation and initial analysis of more than 15,000
 full-length human and mouse cDNA sequences
 JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903
 (2002)
 OTHER SOURCE (OS): CA 138:84317
 REFERENCE: 2 (bases 1 to 1986)
 AUTHOR (AU): Strausberg, R.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (22-DEC-2003) National Institutes of Health,
 Mammalian Gene Collection (MGC), Cancer Genomics
 Office, National Cancer Institute, 31 Center Drive,
 Room 11A03, Bethesda, MD 20892-2590, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..1986	/organism="Homo sapiens" /mol-type="mRNA" /db-xref="taxon:9606" /clone="IMAGE:5734084" /tissue-type="Brain, hippocampus" /clone-lib="NIH-MGC-124" /lab-host="DH10B" /note="Vector: pCMV-SPORT6"
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CDS	37...>1986	/gene="ABCA2" /codon-start=1 /product="ABCA2 protein" /protein-id="AAH64542.1" /db-xref="GI:40555860" /db-xref="LocusID:20" /db-xref="MIM:600047" /translation="MGFLHQQLLLWKNVTLKRR SPWVLAFEIFIPLVLFILLGLRQ KKPTISVKEVSFYTAAPLTSAGILPVMQSLCPDG QRDEFGFLQYANSTVTQLLERLDR VVEEGNLFDPARPSLGSELEALRQHLEALSAGPG TSGSHLDRSTVSSFSLSVARNPQ ELWRFLTQNLSPNSTAQALLAARVDPPEVYHLL FGPSSALDSQSGLHKGQEPWSRLG GNPLFRMEELLLAPALLEQLTCTPGSGELGRILT VPESQKGALQGYRDAVCSGQAAAR ARRFSGLSAELRNQLDVAKVSQQLGLDAPNGSDS SPQAPPPRRLQALLGDLDDAQKVL QDQDVLSALALLLPQGACTGRTPGPPASGAGGAA

LATPDTLQGCQCSAFVQLWAGLQPILCGNNRTIEP
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 QDNFSLPSGMALLQQLDTIDNAAC
 GWIQFMSKVSVDIFKGFDPDEESIVNYTLNQAYQD
 NVTVFASVIFQTRKDGSLPPHVHY
 KIRQNSSFTEKTNEIRRAYWRPGPNT"

SEQUENCE (SEQ):

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181  atctccgtga  aggaagtctc  cttctacaca  gcggcgcccc  tgacgtctgc  cggcatcctg
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421  gaggccctca  gtgcggggccc  gggcacctcg  gggagccacc  tggacagatc  cacagtgtct
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781  cggatcctca  ctgtgcctga  gagtcagaag  ggagccctgc  agggctaccg  ggatgctgtc
841  tgctgtgggc  aggctgctgc  gcgtgccagg  cgcttctctg  ggctgtctgc  tgagctccgg
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961  gactcctcgc  cacaggcgcc  acccccacgg  aggctgcagg  cgcttctggg  ggacctgctg
1021  gatgcccaga  aggttctgca  ggatgtggat  gtctgtcgg  ccctggccct  gctactgccc
1081  cagggtgcct  gcaactggcg  gacccccgga  ccccagcca  gtgggtcggg  tggggcgggc
1141  aatggcactg  gggcaggggc  agtcattggc  cccaacgcca  ccgctgagga  gggcgacccc
1201  tctgtcgcag  cactggccac  cccggacacg  ctgcaggggc  agtgctcagc  cttcgtacag
1261  ctctggggcg  gcctgcagcc  catcttgtgt  ggcaacaacc  gcaccattga  acccgaggcg
1321  ctgcggcggg  gcaacatgag  ctccctgggc  ttcacgagca  aggagcagcg  gaacctgggc
1381  ctccctcgtg  acctcatgac  cagcaacccc  aaaatcctgt  acgcgcctgc  gggctctgag
1441  gtcgaccgag  tcactctcaa  ggccaacgag  acttttgcct  ttgtgggcaa  cgtgactcac
1501  tatgcccagg  tctggctcaa  catctcggcg  gagatccgca  gcttcctgga  gcagggcagg
1561  ctgcagcaac  acctgcgctg  gctgcagcag  tatgtagcag  agctgcggct  gcaccccgag
1621  gcaactgaacc  tgtactgga  tgagctgccg  ccggccctga  gacaggacaa  cttctcgtg
1681  cccagtgga  tggccctcct  gcagcagctg  gataccattg  acaacgcggc  ctgcggctgg
1741  atccagttca  tgtccaaggt  gagcgtggac  atcttcaagg  gcttccccga  cgaggagagc
1801  attgtcaact  acaccctcaa  ccagcctac  caggacaacg  tcaactgttt  tgccagtgtg
1861  atcttccaga  cccggaagga  cggctcgctc  ccgcctcacg  tgcactacaa  gatccgccag
1921  aactccagct  tcaccgagaa  aaccaacgag  atccgcgcgc  cctactggcg  gcctggggcc
1981  aatact

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L3 ANSWER 105 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AY421586 GenBank (R)
 GenBank ACC. NO. (GBN): AY421586
 GenBank VERSION (VER): AY421586.1 GI:39748445
 CAS REGISTRY NO. (RN): 629085-72-9
 SEQUENCE LENGTH (SQL): 5743
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Genome Survey Sequence
 DATE (DATE): 17 Dec 2003
 DEFINITION (DEF): Mus musculus ***ABCA2*** gene, VIRTUAL TRANSCRIPT, partial sequence, genomic survey sequence.
 KEYWORDS (ST): GSS
 SOURCE: Mus musculus (house mouse)
 ORGANISM (ORGN): Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Rodentia;
 Sciurognathi; Muridae; Murinae; Mus
 COMMENT:
 This sequence was made by sequencing genomic exons and ordering them based on alignment.
 REFERENCE: 1 (bases 1 to 5743)
 AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.; Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.; Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.; White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
 TITLE (TI): Inferring nonneutral evolution from human-chimp-mouse orthologous gene trios
 JOURNAL (SO): Science, 302 (5652), 1960-1963 (2003)

REFERENCE: 2 (bases 1 to 5743)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-NOV-2003) Celera Genomics, 45 West Gude
Drive, Rockville, MD 20850, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..5743	/organism="Mus musculus" /mol-type="genomic DNA" /db-xref="taxon:10090"
gene	<1..>5743	/gene="ABCA2" /locus-tag="HCM7606"

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121	tcagccggca	tcttgcccgt	catgcagtcg	ctttgcccctg	atggccagcg	tgatgagttt
181	ggcttcctgc	aatatgccaa	ctccacnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
241	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
301	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
361	nnnnnnnnnn	tttcacccct	ctctctggac	tccgtggcca	gggaccagag	agagctttgg
421	cgtttcctga	tgcagaacct	gtcactgccc	aacagcacgg	cccaagccct	cctagctgcc
481	cgtgtggacc	cttcagagnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
541	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
601	nnnnnnnnnn	agctgctgct	ggctcctgcc	cttttggaaac	agctcacatg	tgtccagggt
661	tctggggaac	tgggccggat	tcttaccatg	cctgagggtc	atcaggtaga	ctctcagggc
721	taccgggatg	ctgtgtgcag	tgggcaggct	acagctcgtg	cccagcgctt	cagcgatttg
781	gccgctgagc	tcaggaacca	gctggacaca	gccaagattg	ctcagcagct	gggcttcgat
841	gtccccaacg	gctcagatcc	ccagccacag	gcaccgtccc	cacagagcct	gccggcactc
901	ttaggggacc	tgtctggatgc	ccagaaactt	ctgcaggatg	tggatgtcct	atcagccctt
961	gccctgctgc	tgcctcaagg	tgcctgtgct	ggccaggcct	ctgcacctca	agccagcagc
1021	ctgaatggcc	tggccaacag	caccgggata	gggtgcaaatt	caggttccaa	caccactggt
1081	gaggagggca	cccagtcacc	tgtcagccca	gcctctcctg	acactctgca	agggcagtg
1141	tcagcctttg	tgcagctctg	ggctggcctg	caaccctatc	tgtgtggcaa	caaccgnnnn
1201	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1261	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1321	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1381	ggcaacgtta	cacactacgc	ccaggctctg	ctcaacatct	ccacagagat	ccgaagcttc
1441	ttggagcaag	gcaggctgca	gcagcatctg	cagtgggttac	agcagtatgt	agctgatctt
1501	cagctacacc	ctgaagcaat	gaacctgtcc	ctggaggagc	tgccacctgc	tctgcgccag
1561	gactttctcac	tgcctaattg	cacagccctc	ctgcaacagc	ttgacacaat	agacaacgca
1621	gcctgtggct	ggatccagtt	catgtccaag	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1681	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1741	nnnnnnnnnn	ccagacacgg	aaggacggct	ccctccctcc	acatgtacat	tacaagattc
1801	gccagaattc	aagcttccat	gagaaaacca	atgagatccg	ccgtgcttat	tggcgtccag
1861	ggcccaacac	cgggtggtcgc	ttctacttcc	tctatggctt	cgtctggatc	caggacatga
1921	tggagcgcg	catcatcaac	acattttgtg	ggcatgacgt	ggtcgaacct	ggcaactacg
1981	tgcagatggt	cccatacccc	tgtacacccc	gtgacgactt	cctgtttgct	attgaacaca
2041	tgatgccatt	gtgcatggtg	atctcctggg	tctactctgt	ggccatgacc	atccagcata
2101	ttgtggcaga	gaaagagcac	aggctcaagg	aggatgatga	gacgatgggc	ctgaacaacg
2161	ccgtgcactg	ggtggcctgg	ttcatcacgg	gctttgtgca	gctgtctatc	tccgtgacag
2221	ctctgaccgc	catcctcaag	tacggccagg	tgtctatgca	cagccacgtg	ctcattatct
2281	ggctcttctt	tgcctgtctac	gctgtggcca	ctatcatggt	ttgcttccctg	gtgtctgtgc
2341	tgtactctaa	ggctaagttg	gcctcagcgt	gtggcggtat	catctacttc	ctgagctacg
2401	ttccctacat	gtatgtagcg	atcccgaggg	aggtagccca	tgacaagatc	actgccttcg
2461	agaagtgcac	tgcgtccctg	atgtccacaa	cagccttttg	cctgggttcc	aagtactttg
2521	cactgtatga	agtggcagga	gtgggcaccc	agtggcacac	gttcagccag	tccccagtg
2581	aaggagatga	cttcaatctg	ctccttgctg	taccatgct	tatggtggac	acggtgggtc
2641	acggcgtgct	cacttggtac	attgaggctg	tgcacccaga	ccaggcctgt	gccattggaga
2701	gccggcactt	cgaggagacc	cgcggcatgg	aggaggagcc	caccacccgt	cccttggctg
2761	tctgtgtgga	caagctcacc	aaggtctata	agaatgacaa	gaagatggcc	ttaaaccac
2821	tgagcctcaa	tctgtatgag	atcaggtggg	tctctttctt	aggccacaac	ggggccggca
2881	agaccacgac	catgtcgatc	ctgactggac	tgttcccacc	cacgtcgggc	tcagccacta
2941	tctatgggca	cgacatccgc	accgagatgg	atgagatccg	caagaacctg	ggcatgtgcc
3001	ccggcactca	ctggtgcaga	cgttgtctgg	aggcatgaag	cgcaagcttt	cgttagccat
3061	tgcctttgtg	ggtggctcta	gagccattat	cttagacgag	cccacggctg	gcgtggaccc
3121	ctatgtctgc	cgtgccatct	gggacctcat	tctgaagtac	aagccgggcc	gcactatcct
3181	cctgtctacc	catcacatgg	atgaggctga	cctgtggggg	gatcgcatgg	ccatcatctc
3241	ccatgggaag	ctcaaatgct	gtggctctcc	cctcttcttc	aagggagcct	atggcgatgg
3301	gtaccgcctc	acatttggtca	agcagcctgc	agaacctggc	acctcccaag	agccagggct

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3421 gttcatccgc aagcatgttg cttcctccct gtctggctca gaacagagca ccgagctctc
3481 ctacatcctg cccagcgagg ccgtcaagaa gggggccttc gagcgctctt ttcagcaact
3541 ggaacacagc ctggatgcgc tccatctgat gtgaaggagt cccggaagga tgtgctgcct
3601 ggggcagagg gcctgacagc tgtggggggt caagctggca acctggctcg gtgctcagag
3661 ctggcacagt cacaggcatc gctgctagt gcactccttg tgggctctgc ccgtggggag
3721 gagggcaccg gctactctga ttgctacgg gactaccgtc cctcttttga caacttgcag
3781 gaccagaca atgtcagctt acaagnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
3841 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
3901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
3961 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
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4081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
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4201 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
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4321 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
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4681 tctatcccag catccttttg tgcccgggtc cctcctatgg tgcggaagat tgcagtgcgg
4741 aggggtggctc agnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
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L3 ANSWER 106 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC): AY421585 GenBank (R)
GenBank ACC. NO. (GBN): AY421585
GenBank VERSION (VER): AY421585.1 GI:39748444
CAS REGISTRY NO. (RN): 629085-71-8
SEQUENCE LENGTH (SQL): 5289
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Genome Survey Sequence
DATE (DATE): 17 Dec 2003
DEFINITION (DEF): Pan troglodytes ***ABCA2*** gene, VIRTUAL
TRANSCRIPT, partial sequence, genomic survey sequence.
KEYWORDS (ST): GSS
SOURCE: Pan troglodytes (chimpanzee)
ORGANISM (ORGN): Pan troglodytes
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Pan

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COMMENT:
This sequence was made by sequencing genomic exons and ordering them based on alignment.

```

REFERENCE: 1 (bases 1 to 5289)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Inferring nonneutral evolution from human-chimp-mouse
orthologous gene trios
JOURNAL (SO): Science, 302 (5652), 1960-1963 (2003)
OTHER SOURCE (OS): CA 140:140421
REFERENCE: 2 (bases 1 to 5289)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.

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5281 agatgctga

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L3 ANSWER 107 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC): AY421584 GenBank (R)
GenBank ACC. NO. (GBN): AY421584
GenBank VERSION (VER): AY421584.1 GI:39748443
CAS REGISTRY NO. (RN): 629085-70-7
SEQUENCE LENGTH (SQL): 6117
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Genome Survey Sequence
DATE (DATE): 17 Dec 2003
DEFINITION (DEF): Homo sapiens ***ABCA2*** gene, VIRTUAL TRANSCRIPT,
partial sequence, genomic survey sequence.
KEYWORDS (ST): GSS
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

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COMMENT:
This sequence was made by sequencing genomic exons and ordering
them based on alignment.

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REFERENCE: 1 (bases 1 to 6117)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Inferring nonneutral evolution from human-chimp-mouse
orthologous gene trios
JOURNAL (SO): Science, 302 (5652), 1960-1963 (2003)
OTHER SOURCE (OS): CA 140:140421
REFERENCE: 2 (bases 1 to 6117)
AUTHOR (AU): Clark,A.G.; Glanowski,S.; Nielson,R.; Thomas,P.;
Kejariwal,A.; Todd,M.A.; Tanenbaum,D.M.; Civello,D.R.;
Lu,F.; Murphy,B.; Ferriera,S.; Wang,G.; Zheng,X.H.;
White,T.J.; Sninsky,J.J.; Adams,M.D.; Cargill,M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-NOV-2003) Celera Genomics, 45 West Gude
Drive, Rockville, MD 20850, USA

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FEATURES (FEAT):
Feature Key      Location      Qualifier
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                /db-xref="taxon:9606"
gene             <1..>6117    /gene="ABCA2"
                /locus-tag="HCM7606"

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121	tctgccggca	tcctgcctgt	catgcaatcg	ctgtgcccg	acggccagcg	agacgagttc
181	ggcttcctgc	agtacgccaa	ctccacnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
241	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
301	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
361	nnnnnnnnnn	tgtcttcctt	ctctctggac	tgggtggcca	gaaacccgca	ggagctctgg
421	cgtttctctga	cgcaaaactt	gtcgtgtccc	aatagcacgg	cccaagcact	cttgcccgcc
481	cgtgtggacc	cgcccgaggn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
541	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
601	nnnnnnnnng	agctgctgct	ggctcctgcc	ctcctggagc	agctcacctg	cacgccgggc
661	tccgggggagc	tgggcccggat	cctcactgtg	cctgagagtc	agaagggagc	cctgcagggc
721	taccgggatg	ctgtctgcag	tgggcaggct	gctgcgcgtg	ccaggcgctt	ctctgggctg
781	tctgctgagc	tccggaacca	gctggacgtg	gccaaagtct	cccagcagct	gggcctggat
841	gcccccaacg	gctcggactc	ctcggccacag	gcgccacccc	cacggaggct	gcaggcgctt
901	ctggggggacc	tgtctggatgc	ccagaaggtt	ctgcaggatg	tggatgtcct	gtcggccctg
961	gccttgctac	tgccccaggg	tgcctgcact	ggccggaccc	ccggaccccc	agccagtgg
1021	gcgggtgggg	cggccaatgg	cactggggca	ggggcagtc	tgggccccaa	cgccaccgct
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1321	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
1381	ggcaacgtga	ctcactatgc	ccaggtcttg	ctcaacatct	acgagacttt	tgcttttctg
1441	ctggagcagg	gcaggctgca	gcaaaccttg	cgctggctgc	cgccggagat	cgcgagcttc
1501	cgctgcacc	ccgaggcact	gaacctgtca	ctggatgagc	agcagtatgt	agcagagctg
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1681	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
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1801	tacaagatcc	gcccgaactc	ccagaccggg	aaggacggct	cgctcccggc	tcacgtgcac
1861	tggcggcctg	ggcccaatac	cagcttcacc	gagaaaacca	acgagatccg	ccgcgctac
1921	caggacatga	tggagcgcgc	tggcgccgcg	ttctacttcc	tctacggctt	cgtctggatc
1981	ggcagctacg	tgcagatggt	catcatcgac	acttttctgg	ggcacgacgt	ggtggagcca
2041	attgagcaca	tgatgccgct	cccctacccc	tgtacacac	gcgatgactt	cctgtttgtc
2101	atccagcaca	tcgtggcgga	gtgcatgggt	atctcctggg	tctactccgt	ggccatgacc
2161	ctgaacaacg	cgggtgcactg	gaaggagcac	cgctcaagg	aggtgatgaa	gaccatgggc
2221	tccgtgacag	cactcacccg	ggtgacctgg	ttcatcaccg	gctttgtgca	gctgtccatc
2281	gtcatcatct	ggctcttctt	catcctgaag	tacggccagg	tgcttatgca	cagccacgtg
2341	gtgtctgtgc	tgtactccaa	ggcagtctac	gcgggtggcca	ccatcatggt	ctgcttctctg
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2461	acggccttcg	agaagtgc	gtacgtggcg	atccgagagg	aggtggcgca	tgataagatc
2521	aagtacttcg	cgctgtatga	cggctccctc	atgtccacga	cggcctttgg	tctgggctct
2581	tccccgggtg	agggggacga	ggtggccggc	gtgggcatcc	agtggcacac	cttcagccag
2641	gccgtggtct	atggcatcct	cttcaacttg	ctcctggctg	tcaccatgct	gatggtggac
2701	nnnnnnnnnn	nnnnnnnnnn	cacgtggtac	attgaggctg	tgcacccagn	nnnnnnnnnn
2761	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
2821	naccaggcct	gtgccatgga	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
2881	cccaccacc	tgcctctggg	gagcggcg	tttgaggaga	cccgtggcat	ggaggaggag
2941	aagaagctgg	ccctgaacaa	tgtctgcgtg	gacaaactca	ccaaggtcta	caaggacgac
3001	ttggggccaca	acggggcggg	gctgagcctg	aacctctacg	agaaccaggt	ggtctccttc
3061	ccaacgtcgg	gttccggccac	caagaccacc	accatgtcca	tcctgaccgg	cctgttccct
3121	cgcaagaacc	tgggcatgtg	catctacggg	cacgacatcc	gcacggagat	ggatgagatc
3181	nnnnnnnnnn	nnnnnnnnnn	ccnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
3241	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
3301	ttgtcgggtg	gcatgaagcg	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
3361	gccatcatcc	tggacgagcc	caagctgtcc	gtggccatcg	ccctcgtggg	ggtgcagaca
3421	gacctcatcc	tgaagtacaa	cacggcgggc	gtggaccctt	ccttcgtggg	cggctctcgc
3481	gaggtgacc	tgtctgggga	gccaggccgc	accatccttc	acgcgcgccc	cgccatctgg
3541	ggctccccgc	tcttctcaa	ccgcattgcc	atcatctccc	tgtccaccca	ccacatggat
3601	cgcccgcccg	agccgggggg	ggcgacctat	atcattctcc	atgggaagct	caagtgtctg
3661	gccccgctga	gcagctgtct	ggcgacgggt	ggcgacgggt	accgctcac	gctggctcaag
3721	tctgacctgc	tgggtctcaga	ccagggctgg	ccagggctgg	catccagccc	cccaggctcg
3781	gccaagaag	gggctttcga	cgagctccag	gtgtcccagt	tcattccgca	gcattgtggc
3841	cacctcnnnn	nnnnnnnnnn	cacaagcacg	gagctctcct	acatcctgcc	cagcgaggcc
3901	nnnnnnnnnn	nnnnnnnnnn	gcgcctcttc	cagcacctgg	agcgcagcct	ggatgcactg
3961	ctccctgggg	cggaggggcc	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
4021	tccgagctga	cccagtcgca	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
4081	ggcgacgagg	gagctggcta	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
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4201	nnnnnnnnnn	nnnnnnnnnn	cagcctgcaa	gnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn
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4981 ctcttcacct ccgaccgctt ccgactgcac cgggtatgggg ccatcacctt tggaaacgtc
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L3 ANSWER 108 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD161955 GenBank (R)
GenBank ACC. NO. (GBN): BD161955
GenBank VERSION (VER): BD161955.1 GI:27867713
CAS REGISTRY NO. (RN): 495919-88-5
SEQUENCE LENGTH (SQL): 26
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 17 Jan 2003
DEFINITION (DEF): Simultaneous assay method of a plurality of different
molecular species proteins mRNA and kit container used
therefor.

KEYWORDS (ST): JP 2002181818-A/6
SOURCE: unidentified
ORGANISM (ORGN): unidentified
unclassified

NUCLEIC ACID COUNT (NA): 5 a 10 c 4 g 7 t

COMMENT:

OS Human ***ABCA2*** gene
PN JP 2002181818-A/6
PD 26-JUN-2002
PF 15-DEC-2000 JP 2000381621
PI MASUHIRO NISHIMURA,HIROSHI YAGUCHI,SHINSAKU NAITO,ISAO HIRAOKA
PC G01N33/53,C12N15/09,C12Q1/48,C12Q1/68,G01N33/566,C12N15/00 CC
Simultaneous assay method of a plurality of different CC
molecular species
CC proteins mRNA and kit container used therefor FH Key
Location/Qualifiers

FT source 1..26
FT /organism='Human ***ABCA2*** gene'.

REFERENCE: 1 (bases 1 to 26)
AUTHOR (AU): Nishimura,M.; Yaguchi,H.; Naito,S.; Hiraoka,I.
TITLE (TI): Simultaneous assay method of a plurality of different
molecular species proteins mRNA and kit container used
therefor
JOURNAL (SO): Patent: JP 2002181818-A 6 26-JUN-2002; OTSUKA
PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..26	/organism="unidentified" /db-xref="taxon:32644"

SEQUENCE (SEQ):

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LOCUS (LOC): BD161954 GenBank (R)
 GenBank ACC. NO. (GBN): BD161954
 GenBank VERSION (VER): BD161954.1 GI:27867712
 CAS REGISTRY NO. (RN): 495919-87-4
 SEQUENCE LENGTH (SQL): 21
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Simultaneous assay method of a plurality of different molecular species proteins mRNA and kit container used therefor.
 KEYWORDS (ST): JP 2002181818-A/5
 SOURCE: unidentified
 ORGANISM (ORGN): unidentified
 unclassified
 NUCLEIC ACID COUNT (NA): 5 a 5 c 6 g 5 t
 COMMENT:
 OS Human ***ABCA2*** gene
 PN JP 2002181818-A/5
 PD 26-JUN-2002
 PF 15-DEC-2000 JP 2000381621
 PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
 PC G01N33/53, C12N15/09, C12Q1/48, C12Q1/68, G01N33/566, C12N15/00 CC
 Simultaneous assay method of a plurality of different molecular species
 CC proteins mRNA and kit container used therefor FH Key
 Location/Qualifiers
 FT source 1..21
 FT /organism='Human ***ABCA2*** gene'.
 REFERENCE: 1 (bases 1 to 21)
 AUTHOR (AU): Nishimura, M.; Yaguchi, H.; Naito, S.; Hiraoka, I.
 TITLE (TI): Simultaneous assay method of a plurality of different molecular species proteins mRNA and kit container used therefor
 JOURNAL (SO): Patent: JP 2002181818-A 5 26-JUN-2002; OTSUKA PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
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SEQUENCE (SEQ):
 1 gtgtgatgtc agcaccactg a

L3 ANSWER 110 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD161953 GenBank (R)
 GenBank ACC. NO. (GBN): BD161953
 GenBank VERSION (VER): BD161953.1 GI:27867711
 CAS REGISTRY NO. (RN): 495919-86-3
 SEQUENCE LENGTH (SQL): 19
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Simultaneous assay method of a plurality of different molecular species proteins mRNA and kit container used therefor.
 KEYWORDS (ST): JP 2002181818-A/4
 SOURCE: unidentified
 ORGANISM (ORGN): unidentified
 unclassified
 NUCLEIC ACID COUNT (NA): 7 a 6 c 4 g 2 t
 COMMENT:
 OS Human ***ABCA2*** gene
 PN JP 2002181818-A/4
 PD 26-JUN-2002
 PF 15-DEC-2000 JP 2000381621
 PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
 PC G01N33/53, C12N15/09, C12Q1/48, C12Q1/68, G01N33/566, C12N15/00 CC
 Simultaneous assay method of a plurality of different molecular species
 CC proteins mRNA and kit container used therefor FH Key

FT source 1..19
 FT /organism='Human ***ABCA2*** gene'.
 REFERENCE: 1 (bases 1 to 19)
 AUTHOR (AU): Nishimura,M.; Yaguchi,H.; Naito,S.; Hiraoka,I.
 TITLE (TI): Simultaneous assay method of a plurality of different
 molecular species proteins mRNA and kit container used
 therefor
 JOURNAL (SO): Patent: JP 2002181818-A 4 26-JUN-2002; OTSUKA
 PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
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L3 ANSWER 111 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD142982 GenBank (R)
 GenBank ACC. NO. (GBN): BD142982
 GenBank VERSION (VER): BD142982.1 GI:27848740
 CAS REGISTRY NO. (RN): 495730-15-9
 SEQUENCE LENGTH (SQL): 21
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Method of assaying human ABC transporter and probe and
 kit therefor.
 KEYWORDS (ST): JP 2002112775-A/53
 SOURCE: unidentified
 ORGANISM (ORGN): unidentified
 unclassified
 NUCLEIC ACID COUNT (NA): 5 a 5 c 6 g 5 t

COMMENT:
 OS human ***ABCA2*** gene
 PN JP 2002112775-A/53
 PD 16-APR-2002
 PF 03-OCT-2000 JP 2000303404
 PI MASUHIRO NISHIMURA,HIROSHI YAGUCHI,SHINSAKU NAITO,ISAO HIRAOKA
 PC C12N15/09,C12Q1/68,C12N15/00
 CC Method of assaying human ABC transporter and probe and kit CC
 therefor

FT Key Location/Qualifiers
 FT source 1..21
 FT /organism='human ***ABCA2*** gene'.
 REFERENCE: 1 (bases 1 to 21)
 AUTHOR (AU): Nishimura,M.; Yaguchi,H.; Naito,S.; Hiraoka,I.
 TITLE (TI): Method of assaying human ABC transporter and probe and
 kit therefor
 JOURNAL (SO): Patent: JP 2002112775-A 53 16-APR-2002; OTSUKA
 PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):

Feature Key	Location	Qualifier
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SEQUENCE (SEQ):
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L3 ANSWER 112 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD142981 GenBank (R)
 GenBank ACC. NO. (GBN): BD142981
 GenBank VERSION (VER): BD142981.1 GI:27848739
 CAS REGISTRY NO. (RN): 495730-14-8
 SEQUENCE LENGTH (SQL): 19
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Patent
 DATE (DATE): 17 Jan 2003
 DEFINITION (DEF): Method of assaying human ABC transporter and probe and

KEYWORDS (ST): JP 2002112775-A/52
SOURCE: unidentified
ORGANISM (ORGN): unidentified
unclassified
NUCLEIC ACID COUNT (NA): 7 a 6 c 4 g 2 t
COMMENT:

OS human ***ABCA2*** gene
PN JP 2002112775-A/52
PD 16-APR-2002
PF 03-OCT-2000 JP 2000303404
PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
PC C12N15/09, C12Q1/68, C12N15/00
CC Method of assaying human ABC transporter and probe and kit CC
therefor
FH Key Location/Qualifiers
FT source 1..19
FT /organism='human ***ABCA2*** gene'.
REFERENCE: 1 (bases 1 to 19)
AUTHOR (AU): Nishimura, M.; Yaguchi, H.; Naito, S.; Hiraoka, I.
TITLE (TI): Method of assaying human ABC transporter and probe and
kit therefor
JOURNAL (SO): Patent: JP 2002112775-A 52 16-APR-2002; OTSUKA
PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):
Feature Key Location Qualifier
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SEQUENCE (SEQ):
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L3 ANSWER 113 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD142932 GenBank (R)
GenBank ACC. NO. (GBN): BD142932
GenBank VERSION (VER): BD142932.1 GI:27848690
CAS REGISTRY NO. (RN): 495729-65-2
SEQUENCE LENGTH (SQL): 26
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 17 Jan 2003
DEFINITION (DEF): Method of assaying human ABC transporter and probe and
kit therefor.
KEYWORDS (ST): JP 2002112775-A/3
SOURCE: unidentified
ORGANISM (ORGN): unidentified
unclassified
NUCLEIC ACID COUNT (NA): 5 a 10 c 4 g 7 t
COMMENT:

OS human ***ABCA2*** gene
PN JP 2002112775-A/3
PD 16-APR-2002
PF 03-OCT-2000 JP 2000303404
PI MASUHIRO NISHIMURA, HIROSHI YAGUCHI, SHINSAKU NAITO, ISAO HIRAOKA
PC C12N15/09, C12Q1/68, C12N15/00
CC Method of assaying human ABC transporter and probe and kit CC
therefor
FH Key Location/Qualifiers
FT source 1..26
FT /organism='human ***ABCA2*** gene'.
REFERENCE: 1 (bases 1 to 26)
AUTHOR (AU): Nishimura, M.; Yaguchi, H.; Naito, S.; Hiraoka, I.
TITLE (TI): Method of assaying human ABC transporter and probe and
kit therefor
JOURNAL (SO): Patent: JP 2002112775-A 3 16-APR-2002; OTSUKA
PHARMACEUTICAL FACTORY INC

FEATURES (FEAT):
Feature Key Location Qualifier
=====+=====+=====

source	1..26	/organism="unidentified" /db-xref="taxon:32644"
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L3 ANSWER 114 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BD140903 GenBank (R)
GenBank ACC. NO. (GBN): BD140903
GenBank VERSION (VER): BD140903.1 GI:23235848
CAS REGISTRY NO. (RN): 457151-68-7
SEQUENCE LENGTH (SQL): 8040
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 18 Sep 2002
DEFINITION (DEF): Human and rat ***ABCA2*** gene.
SOURCE: Rattus sp.
ORGANISM (ORGN): Rattus sp.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Rattus

NUCLEIC ACID COUNT (NA): 1673 a 2464 c 2199 g 1704 t

COMMENT:

OS Rattus sp. (rat)
PN WO 0208424-A/4
PD 31-JAN-2002
PF 26-JUL-2001 WO 2001JP006457
PR 26-JUL-2000 JP 00P 225462
PI NOBUYA INAGAKI
PC C12N15/12, C07K14/47, C12N1/15, C12N1/19, C12N1/21, C12N5/00,
G01N33/ PC 68,
PC G01N33/15, G01N33/50
CC Human and rat ***ABCA2*** gene
FH Key Location/Qualifiers
FT source 1..8040
FT /organism='Rattus sp. (rat)'.
REFERENCE: 1 (bases 1 to 8040)
AUTHOR (AU): Inagaki, N.
TITLE (TI): Human and rat ***ABCA2*** gene
JOURNAL (SO): Patent: WO 0208424-A 4 31-JAN-2002; BANYU
PHARMACEUTICAL CO LTD, NOBUYA INAGAKI

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..8040	/organism="Rattus sp." /db-xref="taxon:10118"

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121 gcgcccggagc ccgtgggtcc tggcgtttga gatcttcatc ccccttgtcc tcttcttcat
181 cctgttgaggc ctgcggcaga agaagcccac catctctgtg aaggaagctt tctacacggc
241 agcaccgctg acatcggccg gcatcctgcc tgtcatgcag tcgctttgcc ctgatggcca
301 gcgtgatgag tttggcttcc tgcagtatgc caactccacg gtcacccagc ttctggaacg
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421 agagcttgag gcactgcacc aacgtctgga ggccttcagc tcggggccctg gcacctggga
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L3 ANSWER 115 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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GenBank VERSION (VER): BD140902.1  GI:23235847
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SEQUENCE LENGTH (SQL): 8040
MOLECULE TYPE (CI):   DNA; linear
DIVISION CODE (CI):   Patent
DATE (DATE):          18 Sep 2002
DEFINITION (DEF):     Human and rat  ***ABCA2***  gene.
SOURCE:               Rattus sp.
ORGANISM (ORGN):      Rattus sp.
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NUCLEIC ACID COUNT (NA): 1673 a 2464 c 2199 g 1704 t

COMMENT:

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REFERENCE: 1 (bases 1 to 8040)
AUTHOR (AU): Inagaki,N.
TITLE (TI):   Human and rat  ***ABCA2***  gene
JOURNAL (SO): Patent: WO 0208424-A 3 31-JAN-2002; BANYU
              PHARMACEUTICAL CO LTD,NOBUYA INAGAKI

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FEATURES (FEAT):

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GenBank VERSION (VER): BD140901.1 GI:23235846
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DIVISION CODE (CI): Patent
DATE (DATE): 18 Sep 2002
DEFINITION (DEF): Human and rat ***ABCA2*** gene.
SOURCE: Homo sapiens.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
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Hominidae; Homo
NUCLEIC ACID COUNT (NA): 1525 a 2724 c 2469 g 1551 t
COMMENT:
OS Homo sapiens (human)

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 PF 26-JUL-2001 WO 2001JP006457
 PR 26-JUL-2000 JP 00P 225462
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 PC C12N15/12, C07K14/47, C12N1/15, C12N1/19, C12N1/21, C12N5/00,
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 FH Key Location/Qualifiers
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REFERENCE:
 AUTHOR (AU): Inagaki, N.
 TITLE (TI): Human and rat ***ABCA2*** gene
 JOURNAL (SO): Patent: WO 0208424-A 2 31-JAN-2002; BANYU
 PHARMACEUTICAL CO LTD, NOBUYA INAGAKI

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CAS REGISTRY NO. (RN): 457151-65-4
SEQUENCE LENGTH (SQL): 8269
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Patent
DATE (DATE): 18 Sep 2002
DEFINITION (DEF): Human and rat ***ABCA2*** gene.
SOURCE: Homo sapiens.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

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NUCLEIC ACID COUNT (NA): 1525 a 2724 c 2469 g 1551 t

COMMENT:

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PR 26-JUL-2000 JP 00P 225462
PI NOBUYA INAGAKI
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FT /organism='Homo sapiens (human)'.

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REFERENCE:

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1 (bases 1 to 8269)
AUTHOR (AU): Inagaki,N.
TITLE (TI): Human and rat ***ABCA2*** gene
JOURNAL (SO): Patent: WO 0208424-A 1 31-JAN-2002; BANYU
PHARMACEUTICAL CO LTD,NOBUYA INAGAKI

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DEFINITION (DEF): Dictyostelium discoideum ABC transporter ABCA.2 (
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SOURCE: Dictyostelium discoideum.
ORGANISM (ORGN): Dictyostelium discoideum
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium
NUCLEIC ACID COUNT (NA): 2658 a 873 c 1019 g 2887 t
REFERENCE: 1 (bases 1 to 7437)
AUTHOR (AU): Anjard,C.; Loomis,W.F.
TITLE (TI): Evolution of the ABC transporters of Dictyostelium
JOURNAL (SO): Unpublished
REFERENCE: 2 (bases 1 to 7437)
AUTHOR (AU): Anjard,C.; Loomis,W.F.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (04-JAN-2002) Biology Dept. 0368, UCSD, 9500
Gilman Drive, La Jolla, CA 92093, USA

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NNSALSSGTNPFQYNIRVDSDDVM

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FLCLISPIAIACSI FAMSARDLEE

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L3 ANSWER 119 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC): SEG F327658S GenBank (R)
GenBank ACC. NO. (GBN): AH010490
GenBank VERSION (VER): AH010490.1 GI:13173187
SEQUENCE LENGTH (SQL): 9553
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Contiguous sequences
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
***ABCA2*** ) gene, complete cds.
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
REFERENCE: 1 (bases 1 to 9553)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 9553)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany
FEATURES (FEAT):

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hypothalamus, midbrain, pons,
and medulla."

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L3 ANSWER 121 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BC008755 GenBank (R)
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GenBank VERSION (VER): BC008755.1 GI:14250598
CAS REGISTRY NO. (RN): 339782-14-8
SEQUENCE LENGTH (SQL): 3320
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 16 Sep 2003
DEFINITION (DEF): Homo sapiens ATP-binding cassette, sub-family A (ABC1),
member 2, mRNA (cDNA clone IMAGE:3344721), partial cds.
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 640 a 1112 c 949 g 619 t
COMMENT:

Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC),
Gaithersburg, Maryland;
Web site: <http://www.nisc.nih.gov/>
Contact: nisc_mgc@nhgri.nih.gov
Akhter, N., Ayale, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P.,
Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R.,
Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C.,
McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W.,
Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L.,
Young, A., Zhang, L.-H. and Green, E.D.
Clone distribution: MGC clone distribution information can be found
through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Series: IRAL Plate: 5 Row: d Column: 15.

REFERENCE: 1 (bases 1 to 3320)
AUTHOR (AU): Strausberg, R.L.; Feingold, E.A.; Grouse, L.H.;
Derge, J.G.; Klausner, R.D.; Collins, F.S.; Wagner, L.;
Shenmen, C.M.; Schuler, G.D.; Altschul, S.F.; Zeeberg, B.;
Buetow, K.H.; Schaefer, C.F.; Bhat, N.K.; Hopkins, R.F.;
Jordan, H.; Moore, T.; Max, S.I.; Wang, J.; Hsieh, F.;
Diatchenko, L.; Marusina, K.; Farmer, A.A.; Rubin, G.M.;
Hong, L.; Stapleton, M.; Soares, M.B.; Bonaldo, M.F.;
Casavant, T.L.; Scheetz, T.E.; Brownstein, M.J.;
Usdin, T.B.; Toshiyuki, S.; Carninci, P.; Prange, C.;
Raha, S.S.; Loquellano, N.A.; Peters, G.J.; Abramson, R.D.;
Mullahy, S.J.; Bosak, S.A.; McEwan, P.J.; McKernan, K.J.;
Malek, J.A.; Gunaratne, P.H.; Richards, S.; Worley, K.C.;
Hale, S.; Garcia, A.M.; Gay, L.J.; Hulyk, S.W.;
Villalon, D.K.; Muzny, D.M.; Sodergren, E.J.; Lu, X.;
Gibbs, R.A.; Fahey, J.; Helton, E.; Kettelman, M.; Madan, A.;
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Blakesley, R.W.; Touchman, J.W.; Green, E.D.;

Myers, R.M.; Butterfield, Y.S.; Krzywinski, M.I.;
Skalska, U.; Smailus, D.E.; Schnerch, A.; Schein, J.E.;
Jones, S.J.; Marra, M.A.

TITLE (TI): Generation and initial analysis of more than 15,000
full-length human and mouse cDNA sequences
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903
(2002)

OTHER SOURCE (OS): CA 138:84317

REFERENCE: 2 (bases 1 to 3320)

AUTHOR (AU): Strausberg, R.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (25-MAY-2001) National Institutes of Health,
Mammalian Gene Collection (MGC), Cancer Genomics
Office, National Cancer Institute, 31 Center Drive,
Room 11A03, Bethesda, MD 20892-2590, USA

FEATURES (FEAT):

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L3 ANSWER 122 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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GenBank VERSION (VER): AF327705.1 GI:13173235
CAS REGISTRY NO. (RN): 325624-59-7
SEQUENCE LENGTH (SQL): 398
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
***ABCA2*** ) gene, exon 48 and complete cds.
SEGMENT: 48 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

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REFERENCE: 1 (bases 1 to 398) -
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 398)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

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L3 ANSWER 123 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S47 GenBank (R)
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 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
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 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
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 Hominidae; Homo
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 REFERENCE: 1 (bases 1 to 225)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 225)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
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61 cggagccgcc atccgcactg cagtcccttc tcggctgctt gctcagcctg ctccggcccc
121 ggtctgcccc cacggagctc cgggcacttg tggcagacga gcccaggagc ctggacacgg
181 aggacgaggg cctcatcagc ttcgaggagg agcgggtgag caggc

```

L3 ANSWER 124 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S46 GenBank (R)
 GenBank ACC. NO. (GBN): AF327703
 GenBank VERSION (VER): AF327703.1 GI:13173233
 CAS REGISTRY NO. (RN): 325624-57-5
 SEQUENCE LENGTH (SQL): 148
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 46.
 SEGMENT: 46 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 36 a 40 c 48 g 24 t
 REFERENCE: 1 (bases 1 to 148)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 148)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..148	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..143	/map="9q34" /gene="ABCA2" /number=46

SEQUENCE (SEQ):

```

1 tgcaggagcg gcaccacaca aagggtgcagt accagctcaa gtcggagcac atctcgctgg
61 cccaggtggt cagcaagatg gagcaggtgt ctggcgtgct gggcatcgag gactactcgg
121 tcagccagac cacactggag aatgtgag

```

L3 ANSWER 125 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S45 GenBank (R)
 GenBank ACC. NO. (GBN): AF327702
 GenBank VERSION (VER): AF327702.1 GI:13173232
 CAS REGISTRY NO. (RN): 325624-56-4
 SEQUENCE LENGTH (SQL): 113
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 45.

SEGMENT: 45 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

NUCLEIC ACID COUNT (NA): 27 a 28 c 37 g 21 t

REFERENCE: 1 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..113	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..108	/map="9q34" /gene="ABCA2" /number=45

SEQUENCE (SEQ):

```

1 accaggtttg gagatggcta catgatcacg gtgcggacca agagcagcca gagtgtgaag
61 gacgtggtgc gggtcttcaa ccgcaacttc ccggaagcca tgctcaaggt gcg

```

L3 ANSWER 126 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S44 GenBank (R)

GenBank ACC. NO. (GBN): AF327701

GenBank VERSION (VER): AF327701.1 GI:13173231

CAS REGISTRY NO. (RN): 325624-55-3

SEQUENCE LENGTH (SQL): 113

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 44.

SEGMENT: 44 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

NUCLEIC ACID COUNT (NA): 20 a 33 c 43 g 17 t

REFERENCE: 1 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 113)
AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

```

=====+=====+=====+=====+=====+=====+=====+=====+=====+=====
source      1..113                               /organism="Homo sapiens"
                                                    /db-xref="taxon:9606"
                                                    /chromosome="9"
                                                    /map="9q34"
                                                    /gene="ABCA2"
                                                    /number=44
exon        11..103

```

SEQUENCE (SEQ):

```

1 tgtcccacag catggaggag tgcgaggcgc tgtgcacgcg gctggccatc atggtgaacg
61 gtcgcctgcg gtgcctgggc agcatccagc acctgaagaa ccggtgagcc ggg

```

L3 ANSWER 127 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S43 GenBank (R)

GenBank ACC. NO. (GBN): AF327700

GenBank VERSION (VER): AF327700.1 GI:13173230

CAS REGISTRY NO. (RN): 325624-54-2

SEQUENCE LENGTH (SQL): 114

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

ABCA2) gene, exon 43.

SEGMENT: 43 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;

Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

Hominidae; Homo

NUCLEIC ACID COUNT (NA): 26 a 40 c 30 g 18 t

REFERENCE: 1 (bases 1 to 114)

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;

Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;

Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic

structure of the human ***ABCA2*** gene and

evidence for sterol-dependent regulation in macrophages

Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

JOURNAL (SO): CA 135:191114

OTHER SOURCE (OS): 2 (bases 1 to 114)

REFERENCE: 2 (bases 1 to 114)

AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical

Chemistry and Laboratory Medicine, University of

Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..114	/organism="Homo sapiens"
		/db-xref="taxon:9606"
		/chromosome="9"
		/map="9q34"
exon	6..109	/gene="ABCA2"
		/number=43

SEQUENCE (SEQ):

```

1 cccaggacga gccaccaca ggcattgacc ccaaggcccg gcgcttctc tggaacctca
61 tccttgacct catcaagaca gggcggtcag tgggtgctgac atcacacagg tgag

```

L3 ANSWER 128 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S42 GenBank (R)

GenBank ACC. NO. (GBN): AF327699

GenBank VERSION (VER): AF327699.1 GI:13173229

CAS REGISTRY NO. (RN): 325624-53-1

SEQUENCE LENGTH (SQL): 155

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

ABCA2) gene, exon 42.

SEGMENT: 42 of 48

SOURCE: human.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 32 a 49 c 47 g 27 t

REFERENCE:

AUTHOR (AU):

1 (bases 1 to 155)
Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI):

Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO):

OTHER SOURCE (OS):

Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

REFERENCE:

AUTHOR (AU):

2 (bases 1 to 155)

TITLE (TI):

Direct Submission

JOURNAL (SO):

Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..155	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..145	/map="9q34" /gene="ABCA2" /number=42

SEQUENCE (SEQ):

1 ccctggccag gtggtgaagt gggctctgga gaagctggag ctgaccaagt acgcagacaa
61 gccggctggc acctacagcg gcggcaacaa gcggaagctc tccacggcca tcgccctcat
121 tgggtacca gccttcattc tcttggttaag tcctg

L3 ANSWER 129 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC):

F327658S41

GenBank (R)

GenBank ACC. NO. (GBN):

AF327698

GenBank VERSION (VER):

AF327698.1 GI:13173228

CAS REGISTRY NO. (RN):

325624-52-0

SEQUENCE LENGTH (SQL):

162

MOLECULE TYPE (CI):

DNA; linear

DIVISION CODE (CI):

Primates

DATE (DATE):

1 Mar 2001

DEFINITION (DEF):

Homo sapiens ABC transporter ***ABCA2*** (

SEGMENT:

41 of 48

SOURCE:

human.

ORGANISM (ORGN):

Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 26 a 50 c 59 g 27 t

REFERENCE:

AUTHOR (AU):

1 (bases 1 to 162)
Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI):

Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO):

OTHER SOURCE (OS):

Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

REFERENCE:

AUTHOR (AU):

2 (bases 1 to 162)

TITLE (TI):

Direct Submission

JOURNAL (SO):

Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..162	/organism="Homo sapiens" /db-xref="taxon:9606"

exon

11..152

/map="9q34"
/gene="ABCA2"
/number=41

SEQUENCE (SEQ):

1 gtgtccccag cgtgctgaag gagctgctcc aggtgcagca gagcctcggc tactgcccgc
61 agtgtgacgc gctgttcgac gagctcacgg cccgggagca cctgcagctg tacacgcggc
121 tgcgtgggat ctcttgaag gacgaggccc gggtaggat ct

L3 ANSWER 130 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC):

F327658S40

GenBank (R)

GenBank ACC. NO. (GBN): AF327697

GenBank VERSION (VER): AF327697.1 GI:13173227

CAS REGISTRY NO. (RN): 325624-51-9

SEQUENCE LENGTH (SQL): 189

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

ABCA2) gene, exon 40.

SEGMENT: 40 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 32 a 53 c 70 g 34 t

REFERENCE: 1 (bases 1 to 189)

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 189)

AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..189	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..184	/map="9q34" /gene="ABCA2" /number=40

SEQUENCE (SEQ):

1 gccagggtcta caagtcccgg aagattggcc gtatcctggc cggtgaccgc ctgtgcctgg
61 gtgtgcgtct tggcgagtgc ttcgggctcc tgggcgtcaa cggtgcgggc aagaccagca
121 ccttcaagat gctgaccggc gacgagagca cgacgggggg cgaggccttc gtcaatggac
181 acaggtggg

L3 ANSWER 131 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC):

F327658S39

GenBank (R)

GenBank ACC. NO. (GBN): AF327696

GenBank VERSION (VER): AF327696.1 GI:13173226

CAS REGISTRY NO. (RN): 325624-50-8

SEQUENCE LENGTH (SQL): 138

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

ABCA2) gene, exon 39.

SEGMENT: 39 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens

Eutelēostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 30 a 35 c 49 g 24 t

REFERENCE: 1 (bases 1 to 138)

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 138)

AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..138	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..128	/map="9q34" /gene="ABCA2" /number=39

SEQUENCE (SEQ):

```

1  gtccccaag gcgcattgct gtgtctacca agcctgtgga ggatgatgtg gacgtggcca
61  gtgagcggca gcgagtgtc cggggagacg ccgacaatga catggtcaag attgagaacc
121 tgaccaaggt gggctctg

```

L3 ANSWER 132 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S38 GenBank (R)

GenBank ACC. NO. (GBN): AF327695

GenBank VERSION (VER): AF327695.1 GI:13173225

CAS REGISTRY NO. (RN): 325624-49-5

SEQUENCE LENGTH (SQL): 152

MOLECULE TYPE (CI): DNA; linear

DIVISION CODE (CI): Primates

DATE (DATE): 1 Mar 2001

DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

SEGMENT: 38 of 48

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 25 a 45 c 50 g 32 t

REFERENCE: 1 (bases 1 to 152)

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.

TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages

JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)

OTHER SOURCE (OS): CA 135:191114

REFERENCE: 2 (bases 1 to 152)

AUTHOR (AU): Kaminski,W.E.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..152	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"

exon 11..143 /gene="ABCA2"
 /number=38

SEQUENCE (SEQ):
 1 ctccccgcag gccagtttga caagatgaag tccccgttcg agtgggacat tgtcaccgcg
 61 ggactgggtgg ccatggcggt tgagggcgtc gtgggcttcc tcctgaccat catgtgccag
 121 tacaacttcc tgcggcgggc acagtgagtg gg

L3 ANSWER 133 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S37 GenBank (R)
 GenBank ACC. NO. (GBN): AF327694
 GenBank VERSION (VER): AF327694.1 GI:13173224
 CAS REGISTRY NO. (RN): 325624-48-4
 SEQUENCE LENGTH (SQL): 134
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
 ABCA2) gene, exon 37.

SEGMENT: 37 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 37 a 37 c 32 g 28 t
 REFERENCE: 1 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..134	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	6..129	/map="9q34" /gene="ABCA2" /number=37

SEQUENCE (SEQ):
 1 cgcaggacct gaaggttgct aacagttacc tgaaaagctg cttcctcatt ttccccaact
 61 acaacctggg ccacgggctc atggagatgg cctacaacga gtacatcaac gactactacg
 121 ccaagattgg tgag

L3 ANSWER 134 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S36 GenBank (R)
 GenBank ACC. NO. (GBN): AF327693
 GenBank VERSION (VER): AF327693.1 GI:13173223
 CAS REGISTRY NO. (RN): 325624-47-3
 SEQUENCE LENGTH (SQL): 159
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
 ABCA2) gene, exon 36.

SEGMENT: 36 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

NUCLEIC ACID COUNT (NA): 24 a 59 c 37 g 39 t
 REFERENCE: 1 (bases 1 to 159)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 159)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..159	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	2..149	/gene="ABCA2" /number=36

SEQUENCE (SEQ):
 1 ggtggtccat cagcccatc atgtaccggg cctccttctg gttcgaggtc cccagctccg
 61 cctacgtgtt cctcattgtc atcaatctct tcatcgcat caccgccacc gtggccacct
 121 tcctgctaca gctcttcgag cagacaagg tggggcggt

L3 ANSWER 135 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S35 GenBank (R)
 GenBank ACC. NO. (GBN): AF327692
 GenBank VERSION (VER): AF327692.1 GI:13173222
 CAS REGISTRY NO. (RN): 325624-46-2
 SEQUENCE LENGTH (SQL): 136
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 35.
 SEGMENT: 35 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 19 a 55 c 26 g 36 t
 REFERENCE: 1 (bases 1 to 136)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 136)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..136	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..126	/gene="ABCA2"

SEQUENCE (SEQ):

1 acccctgcag ctcaactacc tgggtccccgc tacctgctgt gtcacatccc tgttttgtggt
 61 cgacctgccg gcctacacgt cgcccaccaa cttccctgcc gtcctctccc tcttctctgct
 121 ctatgggtaa gcggaa

L3 ANSWER 136 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S34 GenBank (R)
 GenBank ACC. NO. (GBN): AF327691
 GenBank VERSION (VER): AF327691.1 GI:13173221
 CAS REGISTRY NO. (RN): 325624-45-1
 SEQUENCE LENGTH (SQL): 185
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 34.
 SEGMENT: 34 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 30 a 60 c 53 g 42 t
 REFERENCE: 1 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..185	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..175	/gene="ABCA2" /number=34

SEQUENCE (SEQ):

1 gctgcagggc acggatgtcg tcctcgccat cttcatcatc gtggccatgt ccttcgtgcc
 61 ggccagcttc gttgtcttcc tcgtggccga gaagtccacc aaggccaagc acctgcagtt
 121 tgtcagcggc tgcaacccca tcctctactg gctggcgaaac tacgtgtggg acatgggtgcg
 181 cccgg

L3 ANSWER 137 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S33 GenBank (R)
 GenBank ACC. NO. (GBN): AF327690
 GenBank VERSION (VER): AF327690.1 GI:13173220
 CAS REGISTRY NO. (RN): 325624-44-0
 SEQUENCE LENGTH (SQL): 81
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 33.
 SEGMENT: 33 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

REFERENCE: 1 (bases 1 to 81)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 81)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..81	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..71	/gene="ABCA2" /number=33

SEQUENCE (SEQ):
 1 ccgtgtgcag gcatcaccgt caccaaccac cccatgaata agaccagcgc cagcctctcc
 61 ctggattacc tgtaagtgtg g

L3 ANSWER 138 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S32 GenBank (R)
 GenBank ACC. NO. (GBN): AF327689
 GenBank VERSION (VER): AF327689.1 GI:13173219
 CAS REGISTRY NO. (RN): 325624-43-9
 SEQUENCE LENGTH (SQL): 132
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
 ABCA2) gene, exon 32.
 SEGMENT: 32 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 34 a 48 c 28 g 22 t
 REFERENCE: 1 (bases 1 to 132)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 132)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..132	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..122	/gene="ABCA2" /number=32

1 ccttctgacg gttttctaca acaacaaggg ctatcacagc atgccacact acctcaacag
61 cctcaacaac gccatcctgc gtgccaacct gcccaagagc aagggcaacc cggcggctta
121 cggtagagctg ac

L3 ANSWER 139 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S31 GenBank (R)
GenBank ACC. NO. (GBN): AF327688
GenBank VERSION (VER): AF327688.1 GI:13173218
CAS REGISTRY NO. (RN): 325624-42-8
SEQUENCE LENGTH (SQL): 116
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 31.
SEGMENT: 31 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 22 a 36 c 38 g 20 t
REFERENCE: 1 (bases 1 to 116)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 116)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..116	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..106	/gene="ABCA2" /number=31

SEQUENCE (SEQ):
1 gtatggggcc atcacctttg gaaacgtcct gaagtccatc ccagcctcat ttggcaccag
61 ggccccaccc atggtgcgga agatcgcggt gcgcagggtg gccaggtga gcgagg

L3 ANSWER 140 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S30 GenBank (R)
GenBank ACC. NO. (GBN): AF327687
GenBank VERSION (VER): AF327687.1 GI:13173217
CAS REGISTRY NO. (RN): 325624-41-7
SEQUENCE LENGTH (SQL): 234
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 30.
SEGMENT: 30 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 35 a 90 c 69 g 40 t
REFERENCE: 1 (bases 1 to 234)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 234)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..234	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..224	/gene="ABCA2" /number=30

SEQUENCE (SEQ):
 1 gtgcccacag aaatgtggac gtcggcaccc tccctgccgc gcctgggtacg ggagcccgtc
 61 cgctgcacct gctctgcgca gggcaccggc ttctcctgcc ccagcagtgt gggcgggcac
 121 ccgccccaga tgcgggtggt cacaggcgac atcctgaccg acatcaccgg ccacaatgtc
 181 tctgagtacc tgetcttcac ctccgaccgc ttccgactgc accggtgagc tggg

L3 ANSWER 141 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S29 GenBank (R)
 GenBank ACC. NO. (GBN): AF327686
 GenBank VERSION (VER): AF327686.1 GI:13173216
 CAS REGISTRY NO. (RN): 325624-40-6
 SEQUENCE LENGTH (SQL): 327
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 29.
 SEGMENT: 29 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 43 a 126 c 101 g 57 t
 REFERENCE: 1 (bases 1 to 327)
 AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.; Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.; Schmitz, G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 327)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..327	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	6..322	/gene="ABCA2" /number=29

SEQUENCE (SEQ):
 1 cgcaggctgc ggctatcgcc cgacgccagc cccagcagc tcgtgagcac gttccggctg

121 acgttgaaac tgaagcagcgg ggagtcgcgc ctgctggcgg ctcggttctt cgaacagcatg
 181 tgtctggagt ccttcacaca ggggctgcca ctgtccaatt tcgtgccacc cccaccctcg
 241 cccgccccat ctgactcgcc agcgtccccg gatgaggacc tgcaggcctg gaacgtctcc
 301 ctgccgccca ccgctgggcc aggtagt

L3 ANSWER 142 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S28 GenBank (R)
 GenBank ACC. NO. (GBN): AF327685
 GenBank VERSION (VER): AF327685.1 GI:13173215
 CAS REGISTRY NO. (RN): 325624-39-3
 SEQUENCE LENGTH (SQL): 123
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 28.
 SEGMENT: 28 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 22 a 51 c 29 g 21 t
 REFERENCE: 1 (bases 1 to 123)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 123)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..123	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..113	/gene="ABCA2" /number=28

SEQUENCE (SEQ):

1 gccctgccag gtgatctgcc cccgctggtc ctgtcacctt cccagtacca caactacacc
 61 cagccccgtg gcaatttcac cccctacgcc aacgaggagc gccgcgagta ccggtgagggc
 121 ctc

L3 ANSWER 143 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S27 GenBank (R)
 GenBank ACC. NO. (GBN): AF327684
 GenBank VERSION (VER): AF327684.1 GI:13173214
 CAS REGISTRY NO. (RN): 325624-38-2
 SEQUENCE LENGTH (SQL): 217
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 27.
 SEGMENT: 27 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 32 a 73 c 71 g 41 t
 REFERENCE: 1 (bases 1 to 217)

Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 217)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..217	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..217	/gene="ABCA2" /number=27

SEQUENCE (SEQ):
 1 ctctgcacag aggtggaggc agaggccctg tcgaggggtcg gccagggcag ccgcaagctg
 61 gacggcgggt ggctgaaggt gcgccagttc cacgggctgc tggtaaaccg cttccactgc
 121 gcccgccgca actccaaggc actcttctcc cagatcttgc tgccagcctt cttcgtctgc
 181 gtggccatga ccgtggccct gtccgtcccg gagattg

L3 ANSWER 144 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S26 GenBank (R)
 GenBank ACC. NO. (GBN): AF327683
 GenBank VERSION (VER): AF327683.1 GI:13173213
 CAS REGISTRY NO. (RN): 325624-37-1
 SEQUENCE LENGTH (SQL): 247
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 26.
 SEGMENT: 26 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 42 a 72 c 90 g 43 t
 REFERENCE: 1 (bases 1 to 247)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 247)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..247	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..237	/gene="ABCA2" /number=26

1 atgtgaagga gtccaggaag gatgtgctcc ctggggcgga gggcccgagg tctggggagg
 61 gtcacgtctg caatctggcc cgggtgctcg agctgacca gtcgcaggca tgcgtgcagt
 121 cggcgatcat tgtgggctct gcccggtggc acgagggagc tggctacacc gacgtctatg
 181 gcgactaccg cccctctctt gataacccac aggacccaga caatgtcagc ctgcaagggtg
 241 ggggtgg

L3 ANSWER 145 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S25 GenBank (R)
 GenBank ACC. NO. (GBN): AF327682
 GenBank VERSION (VER): AF327682.1 GI:13173212
 CAS REGISTRY NO. (RN): 325624-36-0
 SEQUENCE LENGTH (SQL): 136
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 25.
 SEGMENT: 25 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 28 a 35 c 51 g 22 t
 REFERENCE: 1 (bases 1 to 136)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 136)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..136	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	6..126	/gene="ABCA2" /number=25

SEQUENCE (SEQ):

1 tgcagcacct ggagcgcagc ctggatgcac tgcacctcag cagcttcggg ctgatggaca
 61 cgaccctgga ggaagtgttc ctcaaggtgt cggaggagga tcagtcgctg gagaacagtg
 121 aggccggtga ggggcc

L3 ANSWER 146 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S24 GenBank (R)
 GenBank ACC. NO. (GBN): AF327681
 GenBank VERSION (VER): AF327681.1 GI:13173211
 CAS REGISTRY NO. (RN): 325624-35-9
 SEQUENCE LENGTH (SQL): 200
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 24.
 SEGMENT: 24 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 33 a 76 c 57 g 34 t

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 200)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..200	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..195	/gene="ABCA2" /number=24

SEQUENCE (SEQ):

```

1 tccccacag agccagggtc ggcattccagc cccccagggtc gggccccgct gagcagctgc
61 tccgagctcc aggtgtccca gttcatccgc aagcatgtgg cctcctgcct gctgggtctca
121 gacacaagca cggagctctc ctacatcctg cccagcgcagg ccgccaagaa gggggctttc
181 gaggcgctct tccagggtgtg

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L3 ANSWER 147 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S23 GenBank (R)
GenBank ACC. NO. (GBN): AF327680
GenBank VERSION (VER): AF327680.1 GI:13173210
CAS REGISTRY NO. (RN): 325624-34-8
SEQUENCE LENGTH (SQL): 203
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
ABCA2) gene, exon 23.)
SEGMENT: 23 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 31 a 74 c 58 g 40 t
REFERENCE: 1 (bases 1 to 203)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 203)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..203	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..193	/gene="ABCA2" /number=23

SEQUENCE (SEQ):

1 cttgtcctag gccgcacat ctttctgtcc acccaccaca tggatgagggc tgacctgctt
 61 ggggaccgca ttgccatcat ctcccatggg aagctcaagt gctgcggctc cccgctcttc
 121 ctcaagggca cctatggcga cgggtaccgc ctcacgctgg tcaagcggcc cgccgagccg
 181 gggggccccc aaggtctgtg ttg

L3 ANSWER 148 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S22 GenBank (R)
 GenBank ACC. NO. (GBN): AF327679
 GenBank VERSION (VER): AF327679.1 GI:13173209
 CAS REGISTRY NO. (RN): 325624-33-7
 SEQUENCE LENGTH (SQL): 217
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 22.
 SEGMENT: 22 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 39 a 71 c 70 g 37 t
 REFERENCE: 1 (bases 1 to 217)
 AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.; Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.; Schmitz, G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 217)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..217	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..207	/gene="ABCA2" /number=22

SEQUENCE (SEQ):

1 cctgtcccag gatgatcgag gacctggagc tctccaacaa acggcactca ctggtgcaga
 61 cattgtcggg tggcatgaag cgcaagctgt ccgtggccat cgccttcgtg ggcggctctc
 121 gcgccatcat cctggacgag cccacggcgg gcgtggaccc ctacgcgcgc cgcgccatct
 181 gggacctcat cctgaagtac aagccaggtg agtgggg

L3 ANSWER 149 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S21 GenBank (R)
 GenBank ACC. NO. (GBN): AF327678
 GenBank VERSION (VER): AF327678.1 GI:13173208
 CAS REGISTRY NO. (RN): 325624-32-6
 SEQUENCE LENGTH (SQL): 233
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 21.
 SEGMENT: 21 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

REFERENCE: 1 (bases 1 to 233)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 233)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..233	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34" /gene="ABCA2" /number=21
exon	11..223	

SEQUENCE (SEQ):
 1 acctacccag gtccatcctg accggcctgt tccctccaac gtcgggttcc gccaccatct
 61 acgggcacga catccgcacg gagatggatg agatccgcaa gaacctgggc atgtgccgcg
 121 agcacaatgt gctctttgac cggctcacgg tggaggaaca cctctggttc tactcacggc
 181 tcaagagcat ggctcaggag gagatccgca gagagatgga caagtgggtg ggc

L3 ANSWER 150 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S20 GenBank (R)
 GenBank ACC. NO. (GBN): AF327677
 GenBank VERSION (VER): AF327677.1 GI:13173207
 CAS REGISTRY NO. (RN): 325624-31-5
 SEQUENCE LENGTH (SQL): 199
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 20.
 SEGMENT: 20 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 48 a 59 c 60 g 32 t
 REFERENCE: 1 (bases 1 to 199)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 199)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..199	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34" /gene="ABCA2"
exon	11..191	

SEQUENCE (SEQ):

1 cctgggtgcag aggagacccg tggcatggag gaggagccca cccacctgcc tctggttgct
 61 tgcgtggaca aactcaccaa ggtctacaag gacgacaaga agctggccct gaacaagctg
 121 agcctgaacc tctacgagaa ccaggtggtc tccttcttgg gccacaacgg ggcgggcaag
 181 accaccacca tgtgagtgt

L3 ANSWER 151 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S19 GenBank (R)
 GenBank ACC. NO. (GBN): AF327676
 GenBank VERSION (VER): AF327676.1 GI:13173206
 CAS REGISTRY NO. (RN): 325624-30-4
 SEQUENCE LENGTH (SQL): 185
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***). gene, exon 19.
 SEGMENT: 19 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 29 a 58 c 69 g 29 t
 REFERENCE: 1 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 185)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..185	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..175	/gene="ABCA2" /number=19

SEQUENCE (SEQ):

1 cgacccccag gcatgtacgg gctgccccgg ccctgggtact tcccactgca gaagtcctac
 61 tggctgggca gtgggcggac agaagcctgg gaggaggagct ggccgtgggc acgcaccccc
 121 cgcctcagtg tcatggagga ggaccaggcc tgtgccatgg agagccggcg ctttggtgag
 181 gctgg

L3 ANSWER 152 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S18 GenBank (R)
 GenBank ACC. NO. (GBN): AF327675
 GenBank VERSION (VER): AF327675.1 GI:13173205
 CAS REGISTRY NO. (RN): 325624-29-1
 SEQUENCE LENGTH (SQL): 215
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***). gene, exon 18.
 SEGMENT: 18 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

NUCLEIC ACID COUNT (NA): 32 a 65 c 66 g 52 t
 REFERENCE: 1 (bases 1 to 215)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 215)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..215	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..215	/map="9q34" /gene="ABCA2" /number=18

SEQUENCE (SEQ):
 1 gcctttctcag tccctcatgt ccacgacggc ctttggtctg ggctctaagt acttcgcgct
 61 gtatgaggtg gccggcgtgg gcatccagtg gcacaccttc agccagtccc cggtggaggg
 121 ggacgacttc aacttgctcc tggctgtcac catgctgatg gtggacgccg tggctcatgg
 181 catcctcacg tggtacattg aggctgtgca cccag

L3 ANSWER 153 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S17 GenBank (R)
 GenBank ACC. NO. (GBN): AF327674
 GenBank VERSION (VER): AF327674.1 GI:13173204
 CAS REGISTRY NO. (RN): 325624-28-0
 SEQUENCE LENGTH (SQL): 171
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 17.
 SEGMENT: 17 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 30 a 50 c 54 g 37 t
 REFERENCE: 1 (bases 1 to 171)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 171)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..171	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"

SEQUENCE (SEQ):

1 gccacccag cttcctggtg tctgtgctgt actccaaggc caagctggcc tcggcctgcg
 61 gtggcatcat ctacttctg agctacgtgc cctacatgta cgtggcgatc cgagaggagg
 121 tggcgcatga taagatcacg gccttcgaga agtgcacgc ggtgagggtc g

L3 ANSWER 154 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S16 GenBank (R)
 GenBank ACC. NO. (GBN): AF327673
 GenBank VERSION (VER): AF327673.1 GI:13173203
 CAS REGISTRY NO. (RN): 325624-27-9
 SEQUENCE LENGTH (SQL): 211
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 16.
 SEGMENT: 16 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 37 a 67 c 61 g 46 t
 REFERENCE: 1 (bases 1 to 211)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 211)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..211	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..201	/map="9q34" /gene="ABCA2" /number=16

SEQUENCE (SEQ):

1 ccaccgcag gtgatgaaga ccatgggcct gaacaacgcg gtgcactggg tggcctgggt
 61 catcacccgc ttgtgacgc tgtccatctc cgtgacagca ctcaccgcca tctgaagta
 121 cggccagggtg cttatgcaca gccacgtggt catcatctgg ctcttctctg cagtctacgc
 181 ggtggccacc atcatgttct ggtgagcgcg g

L3 ANSWER 155 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S15 GenBank (R)
 GenBank ACC. NO. (GBN): AF327672
 GenBank VERSION (VER): AF327672.1 GI:13173202
 CAS REGISTRY NO. (RN): 325624-26-8
 SEQUENCE LENGTH (SQL): 135
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 15.
 SEGMENT: 15 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;

NUCLEIC ACID COUNT (NA): 23 a 41 c 42 g 29 t
REFERENCE: 1 (bases 1 to 135)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 135)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..135	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..125	/map="9q34" /gene="ABCA2" /number=15

SEQUENCE (SEQ):
1 ctccccgcag cttcctgttt gtcattgagc acatgatgcc gctgtgcatg gtgatctcct
61 ggggtctactc cgtggccatg accatccagc acatcgtggc ggagaaggag caccggctca
121 aggaggtgcg cgggc

L3 ANSWER 156 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S14 GenBank (R)
GenBank ACC. NO. (GBN): AF327671
GenBank VERSION (VER): AF327671.1 GI:13173201
CAS REGISTRY NO. (RN): 325624-25-7
SEQUENCE LENGTH (SQL): 103
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** ((***ABCA2***) gene, exon 14.
SEGMENT: 14 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo

NUCLEIC ACID COUNT (NA): 22 a 31 c 30 g 20 t
REFERENCE: 1 (bases 1 to 103)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 103)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..103	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	1..103	/map="9q34" /gene="ABCA2"

SEQUENCE (SEQ):

1 acatgatgga ggcgcgccatc atcgacactt ttgtgggggca cgacgtggtg gagccaggca
61 gctacgtgca gatgttcccc tacccttgct acacacgcga tga

L3 ANSWER 157 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S13 GenBank (R)
GenBank ACC. NO. (GBN): AF327670
GenBank VERSION (VER): AF327670.1 GI:13173200
CAS REGISTRY NO. (RN): 325624-24-6
SEQUENCE LENGTH (SQL): 192
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 13.
SEGMENT: 13 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 38 a 69 c 52 g 33 t
REFERENCE: 1 (bases 1 to 192)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 192)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..192	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	9..182	/map="9q34" /gene="ABCA2" /number=13

SEQUENCE (SEQ):

1 ggccccaggt gtgatcttcc agaccgggaa ggacggctcg ctccgcctc acgtgcacta
61 caagatccgc cagaactcca gcttcaccga gaaaaccaac gagatccgcc ggcctactg
121 gcggcctggg cccaatactg gcggccgctt ctacttcctc tacggcttcg tctggatcca
181 gggtagaggag ca

L3 ANSWER 158 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S12 GenBank (R)
GenBank ACC. NO. (GBN): AF327669
GenBank VERSION (VER): AF327669.1 GI:13173199
CAS REGISTRY NO. (RN): 325624-23-5
SEQUENCE LENGTH (SQL): 117
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 12.
SEGMENT: 12 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 26 a 38 c 29 g 24 t

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 117)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..117	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..107	/gene="ABCA2" /number=12

SEQUENCE (SEQ):
1 ctcccgctag gtagcgctgg acatcttcaa gggcttcccc gacgaggaga gcattgtcaa
61 ctacaccctc aaccaggcct accaggacaa cgctactgtt tttgccagtg agctgcc

L3 ANSWER 159 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S11 GenBank (R)
GenBank ACC. NO. (GBN): AF327668
GenBank VERSION (VER): AF327668.1 GI:13173198
CAS REGISTRY NO. (RN): 325624-22-4
SEQUENCE LENGTH (SQL): 178
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (
ABCA2) gene, exon 11.
SEGMENT: 11 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 36 a 57 c 53 g 32 t
REFERENCE: 1 (bases 1 to 178)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 178)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..178	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	6..173	/gene="ABCA2" /number=11

SEQUENCE (SEQ):

61 tgccg̃ccg̃gc c̃ctg̃ag̃ac̃ag̃ g̃ac̃aãc̃tt̃ct cg̃c̃tg̃c̃ccag̃ t̃gg̃cat̃g̃g̃cc c̃t̃c̃tg̃c̃ag̃c
 121 ag̃ctg̃g̃atac̃ cat̃tg̃acaac̃ gc̃gg̃c̃ctg̃cg̃ g̃ctg̃gatccã g̃tt̃cat̃gtcc̃ aag̃gtg̃ag̃

L3 ANSWER 160 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S10 GenBank (R)
 GenBank ACC. NO. (GBN): AF327667
 GenBank VERSION (VER): AF327667.1 GI:13173197
 CAS REGISTRY NO. (RN): 325624-21-3
 SEQUENCE LENGTH (SQL): 134
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 10.
 SEGMENT: 10 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 25 a 41 c 41 g 27 t
 REFERENCE: 1 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 134)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..134	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	1..129	/gene="ABCA2" /number=10

SEQUENCE (SEQ):
 1 gccaacgaga cttttgcttt tgtgggcaac gtgactcact atgcccaggt ctggctcaac
 61 atctcggcgg agatccgcag cttcctggag cagggcaggc tgcagcaaca cctgcgctgg
 121 ctgcagcagg tgcc

L3 ANSWER 161 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S09 GenBank (R)
 GenBank ACC. NO. (GBN): AF327666
 GenBank VERSION (VER): AF327666.1 GI:13173196
 CAS REGISTRY NO. (RN): 325624-20-2
 SEQUENCE LENGTH (SQL): 177
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 9.
 SEGMENT: 9 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 36 a 63 c 52 g 26 t
 REFERENCE: 1 (bases 1 to 177)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;

TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 177)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..177	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	8..167	/map="9q34" /gene="ABCA2" /number=9

SEQUENCE (SEQ):
 1 accccagcac cattgaaccc gaggcgctgc ggcggggcaa catgagctcc ctgggcttca
 61 cgagcaagga gcagcggaac ctgggcctcc tcgtgcacct catgaccagc aaccccaaaa
 121 tcctgtacgc gcctgcgggc tctgaggtcg accgcgtcat cctcaagggt cacgggt

L3 ANSWER 162 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S08 GenBank (R)
 GenBank ACC. NO. (GBN): AF327665
 GenBank VERSION (VER): AF327665.1 GI:13173195
 CAS REGISTRY NO. (RN): 325624-19-9
 SEQUENCE LENGTH (SQL): 388
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (8 of 48 human.)
 SEGMENT: 8 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

NUCLEIC ACID COUNT (NA): 55 a 141 c 132 g 60 t

REFERENCE: 1 (bases 1 to 388)
 AUTHOR (AU): Kaminski, W.E.; Piehler, A.; Pullmann, K.; Porsch-Ozcurumez, M.; Duong, C.; Bared, G.M.; Buchler, C.; Schmitz, G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 388)
 AUTHOR (AU): Kaminski, W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..388	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9"
exon	11..378	/map="9q34" /gene="ABCA2" /number=8

SEQUENCE (SEQ):
 1 ttccctcag ctgggcctgg atgcccccaa cggctcggac tcctcgccac aggcgccacc
 61 cccacggagg ctgcaggcgc ttctggggga cctgctggat gccagaagg ttctgcagga

181 ccccggaacc ccagccagt gtcgggtgg ggcggccaat ggcactggg caagggaagt
 241 catgggcccc aacgccaccg ctgaggagg cgcaccctct gctgcagcac tggccacccc
 301 ggacacgctg cagggccagt gctcagcctt cgtacagctc tgggccggcc tgcagcccat
 361 cttgtgtggc aacaaccggt aggtgggc

L3 ANSWER 163 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S07 GenBank (R)
 GenBank ACC. NO. (GBN): AF327664
 GenBank VERSION (VER): AF327664.1 GI:13173194
 CAS REGISTRY NO. (RN): 325624-18-8
 SEQUENCE LENGTH (SQL): 239
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 7.
 SEGMENT: 7 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 32 a 79 c 85 g 43 t
 REFERENCE: 1 (bases 1 to 239)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 239)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..239	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..229	/gene="ABCA2" /number=7

SEQUENCE (SEQ):
 1 cccatcccag gagctgctgc tggctcctgc cctcctggag cagctcacct gcacgccggg
 61 ctcgggggag ctggggccgga tcctcactgt gcctgagagt cagaaggagg ccctgcaggg
 121 ctaccgggat gctgtctgca gtgggcaggc tgctgcgcgt gccaggcgct tctctgggct
 181 gtctgctgag ctccggaacc agctggacgt ggccaaggct tcccagcagg tgaggccct

L3 ANSWER 164 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S06 GenBank (R)
 GenBank ACC. NO. (GBN): AF327663
 GenBank VERSION (VER): AF327663.1 GI:13173193
 CAS REGISTRY NO. (RN): 325624-17-7
 SEQUENCE LENGTH (SQL): 128
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 6.
 SEGMENT: 6 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 20 a 42 c 37 g 29 t

AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 128)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..128	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	8..118	/gene="ABCA2" /number=6

SEQUENCE (SEQ):
1 ctccctagggtc taccacctgc tcttttggtcc ctcattctgcc ctggattcac agtctggcct
61 ccacaagggt caggagccct ggagccgcct agggggcaat ccctgttcc ggatggaggt
121 gagggcat

L3 ANSWER 165 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S05 GenBank (R)
GenBank ACC. NO. (GBN): AF327662
GenBank VERSION (VER): AF327662.1 GI:13173192
CAS REGISTRY NO. (RN): 325624-16-6
SEQUENCE LENGTH (SQL): 148
MOLECULE TYPE (CI): DNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 5.
SEGMENT: 5 of 48
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 25 a 51 c 42 g 30 t
REFERENCE: 1 (bases 1 to 148)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic
structure of the human ***ABCA2*** gene and
evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 148)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
Chemistry and Laboratory Medicine, University of
Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..148	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..138	/gene="ABCA2" /number=5

1 gcctgtccag tgtcttcctt ctctctggac tccgtggcca gaaacccgca ggagctctgg
 61 cgtttcctga cgcaaaactt gtcgctgccc aatagcacgg cccaagcact cttggccgcc
 121 cgtgtggacc cgcccagggt aaggcagg

L3 ANSWER 166 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S04 GenBank (R)
 GenBank ACC. NO. (GBN): AF327661
 GenBank VERSION (VER): AF327661.1 GI:13173191
 CAS REGISTRY NO. (RN): 325624-15-5
 SEQUENCE LENGTH (SQL): 179
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 4.
 SEGMENT: 4 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 29 a 60 c 65 g 25 t
 REFERENCE: 1 (bases 1 to 179)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 179)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):	Location	Qualifier
Feature Key		
source	1..179	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	8..171	/gene="ABCA2" /number=4

SEQUENCE (SEQ):
 1 ggtgcagggt cacgcagctg cttgagcgcc tggaccgcgt ggtggaggaa ggcaacctgt
 61 ttgaccacgc gcggcccagc ctgggctcag agctcgaggc cctacgccag catctggagg
 121 ccctcagtgc gggcccgggc acctcgggga gccacctgga cagatccaca ggtgtgccc

L3 ANSWER 167 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S03 GenBank (R)
 GenBank ACC. NO. (GBN): AF327660
 GenBank VERSION (VER): AF327660.1 GI:13173190
 CAS REGISTRY NO. (RN): 325624-14-4
 SEQUENCE LENGTH (SQL): 131
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 3.
 SEGMENT: 3 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 20 a 50 c 35 g 26 t
 REFERENCE: 1 (bases 1 to 131)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;

TITLE (TI): Schmitz,G.
 Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 131)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..131	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	9..123	/gene="ABCA2" /number=3

SEQUENCE (SEQ):
 1 tctgccagtc cccttctaca cagcggcgcc cctgacgtct gccggcatcc tgcctgtcat
 61 gcaatcgctg tgcccggacg gccagcgaga cgagttcggc ttctgcagt acgccaactc
 121 cacgtgagtg c

L3 ANSWER 168 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): F327658S02 GenBank (R)
 GenBank ACC. NO. (GBN): AF327659
 GenBank VERSION (VER): AF327659.1 GI:13173189
 CAS REGISTRY NO. (RN): 325624-13-3
 SEQUENCE LENGTH (SQL): 114
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (

SEGMENT: 2 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 18 a 34 c 33 g 29 t

REFERENCE: 1 (bases 1 to 114)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.;
 Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.;
 Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic
 structure of the human ***ABCA2*** gene and
 evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 114)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical
 Chemistry and Laboratory Medicine, University of
 Regensburg, FJS Allee 11, Regensburg 93042, Germany

Feature Key	Location	Qualifier
source	1..114	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	11..104	/gene="ABCA2" /number=2

SEQUENCE (SEQ):
 1 ccctttccag tgggtcctgg ctttcgagat cttcatcccc ctggtgctgt tctttatcct

LOCUS (LOC): F327658S01 GenBank (R)
 GenBank ACC. NO. (GBN): AF327658
 GenBank VERSION (VER): AF327658.1 GI:13173188
 CAS REGISTRY NO. (RN): 325624-12-2
 SEQUENCE LENGTH (SQL): 1222
 MOLECULE TYPE (CI): DNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 1 Mar 2001
 DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) gene, exon 1.
 SEGMENT: 1 of 48
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 178 a 427 c 455 g 162 t
 REFERENCE: 1 (bases 1 to 1222)
 AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
 TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
 JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
 OTHER SOURCE (OS): CA 135:191114
 REFERENCE: 2 (bases 1 to 1222)
 AUTHOR (AU): Kaminski,W.E.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..1222	/organism="Homo sapiens" /db-xref="taxon:9606" /chromosome="9" /map="9q34"
exon	999..1212	/gene="ABCA2" /number=1

SEQUENCE (SEQ):

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1  gccctgaccc agccctgtgg actgagcaga gaaaagcaag tgccttgagg ctgcgggctg
61  ggggtggaag ctgatccctc actcactagc ccagggtcac cttcctgctg caaaggagct
121  gggaggagtg gggagctgtg gcctcggagg tcttcattca cttgaggatg cgccttctat
181  gtgcgccctg acactggaca ccacacagcg ctactccacc ccattcacag gggggaaact
241  gagtctggga agcgcggtca gagccacca tggggtcagc ctgtcctctg tcgctctcta
301  caggccacgc ggaggaactg cccacctcc cggggcgccc cagcaggtgc caagccacag
361  ccgcagaacc gcctgatccc gaactccctg tgcagagacc agactcgccc gaatatgggg
421  agaaaaacga gccgcgtgca gcaggggccc cctcggtccc ctgcctgctc cgctcacggc
481  gagegttctt ggggcctcga gtttcccccc ttccgctggc tgctcggaat cgcgggacgg
541  acccacctgg ccgccttgcc tcccttccag gtgggcacca cctggactcc aagtgctggg
601  ttacaaagca cacaggagac cttacgggg gtgagctggc ccctcgccag cgtccgctcg
661  gcgcgccccg gggacagtga aggcttgggg cgctctgca gagtgcgag cgcggtgggc
721  gcagccggat gcctctggga gaagagcgca gcgcccgagg gtcccccggc ctacgaaggc
781  taagccgggg tctcggattc gatgtgggag cgtcgcgtga cgcgccgcca ggggcggccc
841  ggaggcttcc cggcggcggc gcgcgcaggg tctcgggccc gggtcgggtc cgggcgcggc
901  gcgggcggcg ggcgcctcct ggcgggcgcg gacggagcgc ggcgccttta agcggggggc
961  ggcgggggcg gggcagagtc gctgtcgccg cggccgcggg ggcggagcca gcgcggatcg
1021  ggtcccggac gcccgagcgc cccgcccccg cgcgggcgat gccagcggc cgggcgggct
1081  gcggggcccg gcggggcgcg cagaggagcg ggcgcggcg ctgagcgggc ggagcgtggc
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1201  cgccggagcc cggtagccc ac

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LOCUS (LOC): AF327657 GenBank (R)
 GenBank ACC. NO. (GBN): AF327657
 GenBank VERSION (VER): AF327657.1 GI:13173185
 CAS REGISTRY NO. (RN): 325624-11-1

MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 1 Mar 2001
DEFINITION (DEF): Homo sapiens ABC transporter ***ABCA2*** (***ABCA2***) mRNA, complete cds.
SOURCE: human.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 1371 a 2495 c 2239 g 1377 t
REFERENCE: 1 (bases 1 to 7482)
AUTHOR (AU): Kaminski,W.E.; Piehler,A.; Pullmann,K.; Porsch-Ozcurumez,M.; Duong,C.; Bared,G.M.; Buchler,C.; Schmitz,G.
TITLE (TI): Complete coding sequence, promoter region, and genomic structure of the human ***ABCA2*** gene and evidence for sterol-dependent regulation in macrophages
JOURNAL (SO): Biochem. Biophys. Res. Commun., 281 (1), 249-258 (2001)
OTHER SOURCE (OS): CA 135:191114
REFERENCE: 2 (bases 1 to 7482)
AUTHOR (AU): Kaminski,W.E.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-DEC-2000) Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, FJS Allee 11, Regensburg 93042, Germany

FEATURES (FEAT):

Feature Key	Location	Qualifier
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CDS	7..7317	/gene="ABCA2" /codon-start=1 /product="ABC transporter ABCA2" /protein-id="AAK14334.1" /db-xref="GI:13173186" /translation="MGFLHQQLLLWKNVTLKRR SPWVLA FEIF IPLVLF FILLGLRQ KKPTISVKEVPFYTAAPLTSAGILPVMQSLCPDG QRDEFGFLQYANSTVTQLLERLDR VVEEGNLFDPARPSLGSELEALRQHLEALSAGPG TSGSHLDRSTVSSFSLDSVARNPQ ELWRFLTQNLSPNSTAQALLAARVDPPEVYHLL FGPSSALDSQSLHKGQEPWSRLG GNPLFRMEELLLAPALLEQLTCTPGSGELGRILT VPESQKGALQGYRDAVCSGQAAAR ARRFSGLSAELRNQLDVAKVSQQLGLDAPNGSDS SPQAPPPRRLQALLGDLLDAQKVL QDVDVLSALALLLPQGACTGRTPGPPASGAGGAA NGTGAGAVMGP NATAE EGAPSAAA LATPDTLQGC SAFVQLWAGLQPILCGNNRTIEP EALRRGNMSSLGFTSKEQRNLGLL VHLMTSNPKILYAPAGSEVDRVILKANETFAFVG NVTHYAQVWLNISAEIRSFLEQGR LQQHLRWLQQYVAELRLHPEALNLSLDELPPALR QDNFSLPSGMALLQQLDTIDNAAC GWIQFMSKVSVDIFKGFDPDEESIVNYTLNQAYQD NVTVFASVIFQTRKDGSLPPHVHY KIRQNSSFTEKTNEIRRAYWRPGPNTGGRFYFLY GFVWIQDMMERAIIDTFVGHDVVE PGSYVQMFPPYCYTRDDFLFVIEHMMPLCMVISW VYSVAMTIQHIVAEKEHRLKEVMK TMGLNNAVHWVAFITGFVQLSISVTALTALIKY GQVLMHSHVVIWLFLAVYAVATI MFCFLVSVLYSKAKLASACGGIIYFLSYVPYMYV AIREEVAHDKITAFEKCIASLMST TAFGLGSKYFALYEVAGVGIIQWHTFSQSPVEGDD FNLLLAVTMLMVDVAVVYGILTWYI EAVHPGMYGLPRPWYFPLQKSYWLGSGRTEAWEW SWPWARTPRLSVMEEDQACAMESR RFEETRGMEEEP THLPLVVCVDKLT KVKYKDDKKL

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1801	caggacaacċg	tċactċgtttt	tċċcagċtċg	atċttċcaga	ċċċggaagċga	ċgċtċgċtċc
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1981	ggċttċċgtċt	ggatċċcagċga	ċatċatċggag	ċċgċċċatċa	tċgacactttt	tċgtċggċgċac
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3361	tċactċgtċgċ	agacattċgtċ	ggċtċggċatċg	aagċċaaċgċ	tċtċċgtċggċ	ċatċċċċtċc
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3661	ċtċacċgtċg	tċaaċċċċċ	ċċċċgagċċg	gggċgċċċċ	aagagċċagċ	gċtċggċatċċ
3721	agċċċċċċag	gtċċggċċċċ	gċtċgagċagċ	tċgtċċċagċ	tċċagċtċgtċ	ċċagċtċċatċ
3781	ċgċaaċċatċg	tċggċċtċċtċg	ċċtċgtċggċ	tċagacacaa	gċacċgagċt	ċtċċtċacatċ
3841	ċtċċċċagċg	aggċċċċċaa	gaagċggċgtċ	tċċgagċċċ	tċttċċagċa	ċċtċggagċċg
3901	agċċtċgċatċg	ċactċċacċt	ċagċagċtċtċ	ggċtċgatċg	acacċacċċt	ggagċaagċtċg
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4021	tċċagċgaagċg	atċgtċtċċċ	tċggċċċgag	ggċċċċgċgt	ċtċggċgagċg	tċacċgtċggċ
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4201	ċċċċtċtttċg	ataacċċċacaa	ggacċċagac	aatċgtċagċċ	tċgaaċagċgt	ggagċcagag
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4621	gtċggċtċgċa	ċċtċċgtċgtċ	ċaagċtċċċċ	gċċaaċċgċt	ċgċtċgggċċċ	ċagċtċgaaċ
4681	ċtċagċcagċ	gggagċtċċg	ċċtċgtċggċ	gċtċċgtċtċt	tċgacagċat	gtċtċtċggag
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4801	tċtċactċgċ	ċagċgtċċċċ	ggatċgagċac	ċtċcagċċċt	ggaaċgtċtċc	ċċtċċċċċċċ
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L3 ANSWER 171 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

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  OTHER SOURCE (OS):    CA 134:189574
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  AUTHOR (AU):          Inagaki,N.
  TITLE (TI):           Direct Submission
  JOURNAL (SO):         Submitted (03-FEB-2000) Nobuya Inagaki, Akita
                        University School of Medicine, Department of
                        Physiology; Hondo 1-1-1, Akita, Akita 010-8543, Japan
                        (E-mail:inagaki@med.akita-u.ac.jp, Tel:+81-18-884-6060,
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L3 ANSWER 172 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AF178941 GenBank (R)
GenBank ACC. NO. (GBN): AF178941
GenBank VERSION (VER): AF178941.1 GI:9957466
CAS REGISTRY NO. (RN): 392134-40-6
SEQUENCE LENGTH (SQL): 8056
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates

DEFINITION (DEF): Homo sapiens ATP-binding cassette sub-family A member 2
 (***ABCA2***) mRNA, complete cds.

SOURCE: human.

ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 1461 a 2694 c 2416 g 1485 t

REFERENCE: 1 (bases 1 to 8056)
 AUTHOR (AU): Vulevic,B.; Chen,Z.; Boyd,J.T.; Davis,W. Jr.;
 Walsh,E.S.; Belinsky,M.G.; Tew,K.D.
 TITLE (TI): Cloning and characterization of human adenosine
 5'-triphosphate-binding cassette, sub-family A,
 transporter 2 (***ABCA2***)
 JOURNAL (SO): Cancer Res., 61 (8), 3339-3347 (2001)
 OTHER SOURCE (OS): CA 135:72979

REFERENCE: 2 (bases 1 to 8056)
 AUTHOR (AU): Vulevic,B.; Chen,Z.; Walsh,E.S.; Tew,K.D.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (19-AUG-1999) Pharmacology, Fox Chase Cancer
 Center, 7701 Burholme avenue, Philadelphia, PA 19111,
 USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
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gene	1..8056	/gene="ABCA2"
CDS	51..7361	/gene="ABCA2" /note="ATP binding cassette transporter 2; transmembrane protein highly expressed in brain; belongs to ABC1 family" /codon-start=1 /product="ATP-binding cassette sub-family A member 2" /protein-id="AAG09372.1" /db-xref="GI:9957467" /translation="MGFLHQLQLLLWKNVTLKRR SPWVLAFEIIFLPLVLFILLGLRQ KKPTISVKEVPFYTAAPLTSAGILPVMQSLCPDG QRDEFGFLQYANSTVTQLLERLDR VVEEGNLFDPARPSLGSELEALRQHLEALSAGPG TSGSHLDRSTVSSFSLDSVARNPQ ELWRFLTQNLSPNSTAQALLAARVDPPEVYHLL FGPSSALDSQSGLHKGQEPWSRLG GNPLFRMEELLLAPALLEQLTCTPGSGELGRILT VPESQKGALQGYRDAVCSGQAAAR ARRFSGLSAELRNQLDVAKVSQQLGLDAPNGSDS SPQAPPPRRLQALLGDLLDAQKVL QDVDVLSALALLLPQACTGRTPGPPASGAGGAA NGTGAGAVMGPNTAEEGAPSAAA LATPDTLQGQCSAFVQLWAGLQPILCGNNRTIEP EALRRGNMSSLGFTSKEQRNLGLL VHLMTSNPKILYAPAGSEVDRVILKANETFADFVG NVTHYAQVWLNISAEIRSFLEQGR LQQHLRWLQQYVAELRLHPEALNLSLDELPPALR QDNFSLPSGMALLQQLDITIDNAAC GWIQFMSKVSVDIFKGFPEESIVNYTLNQAYQD NVTVFASVIFQTRKDGSLPPHVHY KIRQNSSFTEKTNEIRRAYWRPGPNTGGRFYFLY GFVWIIQDMMERAIIDTFVGHDDVE PGSYVQMFPPYPCYTRDDFLFVIEHMMPLCMVISW VYSVAMTIQHIVAEKEHRLKEVMK TMGLNNAVHWVAVFITGFVQLSISVTALTAILKY QVLMHSHVVIWFLAVYAVATI MFCFLVSVLYSKAKLASACGGIIYFLSYVPYMYV AIREEVAHDKITAFEKCIASLMST TAFGLGSKYFALYEVAGVGIQWHTFSQSPVEGDD FNLLLAVTMLMVDVAVVYGILTWYI EAVHPGMYGLPRPWYFPLQKSYWLGSGRTEAWEW

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1441	ct̄gc̄gḡḡctc̄	t̄gaḡgt̄cgac̄	c̄gc̄gt̄cat̄cc̄	t̄caāgḡccaa	cḡagact̄ttt̄	ḡct̄tt̄t̄gt̄gḡ
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1921	acaaḡat̄cc̄ḡ	cc̄agaac̄t̄cc̄	aḡct̄t̄cac̄ḡ	aḡaaaac̄caa	cḡagat̄cc̄gc̄	c̄gc̄gc̄ct̄act̄
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3121	t̄gḡgḡcc̄ac̄aa	cḡgḡgḡc̄gḡḡc̄	aaḡac̄cc̄acca	cc̄at̄gt̄cc̄at̄	c̄ct̄ḡac̄cḡgḡc̄	ct̄gt̄t̄cc̄ct̄c̄
3181	caac̄gt̄cḡgḡ	t̄t̄cc̄ḡcc̄acc̄	at̄ct̄ac̄gḡgḡc̄	ac̄ḡac̄at̄cc̄ḡ	cac̄gḡaḡat̄ḡ	gat̄gaḡat̄cc̄
3241	ḡcaagaac̄ct̄	gḡgc̄at̄gt̄gc̄	cc̄gc̄aḡc̄aca	at̄gt̄gt̄ct̄ct̄	t̄gac̄cḡgḡct̄c̄	ac̄gḡt̄gḡaḡḡ
3301	aac̄ac̄ct̄ct̄ḡ	gt̄t̄ct̄act̄ca	cḡgt̄caaga	gc̄at̄gḡct̄ca	gḡaḡḡaḡat̄c̄	c̄gc̄aḡaḡaga
3361	t̄gḡacaaḡat̄	gat̄cḡagḡac̄	ct̄gḡaḡct̄ct̄	cc̄aacaac̄aḡ	gc̄act̄cact̄ḡ	gt̄gc̄aḡac̄at̄
3421	t̄gt̄cḡgḡt̄gḡ	cat̄gaaḡcḡc̄	aaḡct̄gt̄c̄cḡ	t̄gḡcc̄at̄cḡc̄	ct̄t̄cḡt̄gḡgḡc̄	gḡct̄ct̄cḡcḡ
3481	cc̄at̄cat̄c̄ct̄	gḡac̄ḡaḡccc̄	ac̄gḡcḡgḡcḡ	t̄gḡacc̄cc̄cta	c̄gc̄cḡcḡcc̄ḡc̄	gcc̄at̄ct̄gḡḡ
3541	ac̄ct̄cat̄c̄ct̄	gaaḡt̄acaaḡ	cc̄aḡgḡc̄ḡca	cc̄at̄c̄ct̄t̄ct̄	gt̄cc̄ac̄cc̄cac̄	cac̄at̄gḡat̄ḡ
3601	agḡct̄gac̄ct̄	ḡct̄t̄gḡgḡac̄	cḡcat̄t̄ḡcca	t̄cat̄ct̄cc̄ca	t̄gḡgaaḡct̄c̄	aaḡt̄gt̄ct̄ḡcḡ
3661	ḡct̄ccc̄cḡct̄	ct̄t̄c̄ct̄caaḡ	gḡcac̄ct̄at̄ḡ	gc̄ḡac̄gḡgḡta	cc̄gc̄ct̄cac̄ḡ	ct̄gḡt̄caaḡc̄
3721	gḡcc̄cḡcc̄ga	ḡcc̄gḡgḡgḡḡc̄	cc̄cc̄caaḡaḡc̄	caḡgḡct̄gḡc̄	at̄cc̄aḡcc̄cc̄	cc̄aḡgt̄cḡgḡ
3781	cc̄cc̄cḡt̄gaḡ	caḡct̄gt̄ct̄c̄	gāgt̄ct̄c̄aḡḡ	t̄gt̄cc̄c̄aḡt̄t̄	cat̄cc̄ḡcaaḡ	cat̄gt̄gḡc̄ct̄
3841	c̄ct̄ḡc̄ct̄gt̄c̄	gḡt̄ct̄c̄aḡac̄	acaaḡcac̄gḡ	aḡct̄ct̄c̄cta	cat̄c̄ct̄ḡccc̄	aḡcḡaḡgḡcc̄ḡ
3901	ccaagaaḡgḡ	gḡct̄t̄t̄cḡaḡ	cḡc̄ct̄ct̄t̄cc̄	aḡcac̄ct̄ḡga	gc̄gc̄aḡc̄ct̄ḡ	gat̄gc̄act̄gc̄
3961	ac̄ct̄c̄aḡc̄aḡ	ct̄t̄cḡgḡct̄ḡ	at̄gḡac̄ac̄ga	cc̄ct̄gḡaḡga	aḡt̄gt̄t̄c̄ct̄c̄	aaḡgt̄gt̄cḡḡ
4021	agḡaḡgat̄ca	gt̄cḡct̄gḡaḡ	aac̄aḡt̄gaḡḡ	cc̄gat̄gt̄gaa	gḡaḡt̄cc̄aḡḡ	aaḡgat̄gt̄gc̄
4081	t̄cc̄ct̄gḡgḡc̄	gḡaḡgḡcc̄cḡ	gc̄gt̄ct̄gḡgḡ	agḡgt̄cac̄gc̄	t̄gḡcaat̄ct̄ḡ	ḡcc̄cḡgt̄ḡct̄
4141	c̄gḡaḡct̄gac̄	cc̄aḡt̄cḡc̄aḡ	gc̄at̄cḡct̄gc̄	aḡt̄cḡcḡct̄c̄	at̄ct̄gt̄gḡgḡc̄	ct̄gt̄cc̄cḡt̄ḡ
4201	gc̄ḡac̄gaḡgḡ	aḡct̄gḡct̄ac̄	ac̄cḡac̄gt̄ct̄	at̄gḡcḡact̄a	cc̄gc̄cc̄cc̄ct̄c̄	t̄tt̄gataacc̄
4261	cac̄aḡḡac̄cc̄	aḡacaat̄gt̄c̄	aḡc̄ct̄ḡcaaḡ	agḡt̄gḡaḡgḡc̄	aḡaḡgḡcc̄ct̄ḡ	t̄cḡaḡgḡt̄cḡ
4321	gcc̄aḡgḡc̄aḡ	cc̄ḡcaaḡct̄ḡ	gac̄gḡcḡgḡt̄	gḡct̄gaaḡgt̄	gc̄gc̄cc̄aḡt̄tc̄	cac̄gḡgḡct̄gc̄
4381	t̄gḡt̄caaac̄ḡ	ct̄t̄cc̄act̄gc̄	ḡcc̄cḡcc̄ḡca	act̄ccaaḡgḡc̄	act̄ct̄t̄t̄ct̄cc̄	caḡat̄ct̄t̄gc̄
4441	t̄gcc̄aḡc̄ct̄t̄	ct̄t̄cḡt̄ct̄gc̄	gt̄gḡcc̄at̄ga	cc̄gt̄gḡcc̄ct̄	gt̄cc̄gt̄cc̄cḡ	gaḡat̄t̄gḡt̄ḡ
4501	at̄ct̄ḡcc̄cc̄c̄	ḡct̄gḡt̄c̄ct̄ḡ	t̄cac̄ct̄t̄ccc̄	aḡt̄acc̄ac̄aa	ct̄ac̄acc̄c̄aḡ	cc̄cc̄gt̄gḡca
4561	at̄tt̄cat̄ccc̄	ct̄ac̄ḡcc̄aac̄	gaḡḡaḡcḡcc̄	gc̄ḡaḡt̄ac̄cḡ	ḡct̄ḡcḡgḡcta	t̄cḡcc̄cḡac̄ḡ
4621	cc̄aḡcc̄cc̄cca	gc̄aḡct̄cḡt̄ḡ	aḡcac̄gt̄t̄cc̄	gḡct̄ḡcc̄gt̄c̄	gḡgḡgt̄gḡgt̄	gcc̄ac̄ct̄gc̄ḡ
4681	t̄ḡct̄caaḡt̄c̄	t̄ccc̄ḡcc̄aac̄	gḡct̄cḡct̄gḡ	gḡcc̄cc̄ac̄gt̄t̄	gaac̄ct̄ḡaḡc̄	aḡcḡgḡḡaḡt̄
4741	c̄gc̄gc̄ct̄ḡct̄	gḡcḡgḡct̄cḡḡ	t̄t̄ct̄t̄cḡaca	gc̄at̄gt̄gt̄ct̄	gḡaḡt̄c̄ct̄tc̄	ac̄ac̄aḡgḡgḡc̄
4801	t̄gcc̄act̄gt̄c̄	caat̄t̄t̄cḡt̄ḡ	cc̄ac̄cc̄cc̄cac̄	c̄ct̄cḡcc̄cḡc̄	cc̄cat̄ct̄ḡac̄	t̄cḡcc̄aḡc̄gt̄
4861	cc̄cc̄gḡat̄ga	gḡac̄ct̄ḡc̄aḡ	ḡc̄ct̄ḡgaac̄ḡ	t̄ct̄c̄ct̄gt̄cc̄	ḡcc̄cc̄ac̄cḡct̄	gḡgḡcc̄aḡaaa
4921	t̄gt̄gḡac̄gt̄c̄	gḡcac̄cc̄t̄cc̄	ct̄ḡcc̄cḡcḡcc̄	t̄gḡt̄ac̄gḡga	ḡcc̄cḡt̄cc̄gc̄	t̄gc̄ac̄ct̄ḡct̄
4981	ct̄ḡcḡcaḡgḡ	cac̄cḡgt̄t̄tc̄	t̄c̄ct̄ḡcc̄cc̄ca	gc̄aḡt̄gt̄gḡḡ	cḡgḡgc̄ac̄cc̄ḡ	cc̄cc̄caḡat̄gc̄
5041	gḡgt̄gḡt̄cac̄	agḡcḡac̄at̄c̄	ct̄ḡacc̄ḡaca	t̄cac̄cḡgḡcca	caat̄gt̄ct̄ct̄	gaḡt̄ac̄ct̄gc̄
5101	t̄ct̄t̄cac̄ct̄c̄	cḡacc̄ḡct̄tc̄	cḡact̄gc̄acc̄	gḡtat̄gḡgḡc̄	cat̄cac̄ct̄tt̄	gḡaaāc̄gt̄cc̄
5161	t̄gaaḡt̄cc̄at̄	cc̄c̄aḡct̄ca	t̄tt̄gḡc̄acca	gḡgḡcc̄cc̄acc̄	cat̄gḡt̄gc̄gḡ	aaḡat̄cḡcḡḡ
5221	t̄gc̄gc̄aḡgḡc̄	t̄gcc̄c̄aḡgt̄t̄	t̄t̄ct̄acaaca	acaaḡgḡcta	t̄cac̄aḡcat̄ḡ	cc̄cc̄ac̄t̄acc̄
5281	t̄caāc̄aḡc̄ct̄	caacaac̄ḡcc̄	at̄c̄ct̄ḡcḡt̄ḡ	ccaac̄ct̄ḡcc̄	caaḡaḡc̄aāḡ	gḡcaac̄cc̄cḡḡ
5341	cḡḡct̄t̄ac̄gḡ	cat̄cac̄cḡt̄c̄	accaacc̄acc̄	cc̄at̄gaataa	gacc̄aḡcḡcc̄	aḡc̄ct̄ct̄ccc̄
5401	t̄gḡatt̄ac̄ct̄	ḡct̄gc̄aḡgḡc̄	ac̄gḡat̄gt̄cḡ	t̄cat̄cḡcc̄at̄	ct̄t̄cat̄cat̄c̄	gt̄gḡcc̄at̄gt̄
5461	c̄ct̄t̄cḡt̄ḡcc̄	gḡcc̄aḡct̄tc̄	gt̄t̄gt̄ct̄t̄cc̄	t̄cḡt̄gḡcc̄ga	gaaḡt̄cc̄acc̄	aaḡgḡccaaḡc̄
5521	at̄ct̄gc̄aḡtt̄	t̄gt̄c̄aḡcḡgḡc̄	t̄ḡcaac̄cc̄cca	t̄cat̄ct̄act̄ḡ	ḡct̄gḡcḡaac̄	t̄ac̄gt̄gt̄gḡḡ
5581	ac̄at̄ḡct̄caa	ct̄ac̄ct̄gḡt̄c̄	cc̄cḡct̄ac̄ct̄	ḡct̄gt̄gt̄cat̄	cat̄c̄ct̄gt̄tt̄	gt̄gt̄t̄cḡacc̄
5641	t̄ḡcc̄gḡc̄cta	cac̄gt̄cḡccc̄	accaact̄t̄cc̄	ct̄ḡcḡct̄c̄ct̄	ct̄cc̄ct̄ct̄tc̄	ct̄gt̄ct̄at̄ḡ
5701	gḡt̄gḡt̄cc̄at̄	cac̄ḡcc̄cat̄c̄	at̄gt̄acc̄cc̄gḡ	c̄ct̄c̄ct̄t̄ct̄ḡ	gt̄t̄cḡaḡgt̄c̄	cc̄c̄aḡct̄cc̄ḡ
5761	c̄ct̄ac̄gt̄gt̄t̄	c̄ct̄cat̄t̄gt̄c̄	at̄caat̄ct̄ct̄	t̄cat̄cḡḡcat̄	cac̄cḡcc̄acc̄	gt̄gḡcc̄ac̄ct̄
5821	t̄c̄ct̄ḡct̄aca	ḡct̄ct̄t̄cḡaḡ	cac̄ḡacaaḡḡ	ac̄ct̄gaaḡgt̄	t̄gt̄caāc̄aḡt̄	t̄ac̄ct̄ḡaaaa


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5941  ācġāgtacat  caacgagtac  tacgccaaga  ttġġccagtt  tġacaagātġ  aāġtccccgt
6001  tġagagtggga  cattgtcacc  cġcġgactġġ  tġġccatġġc  ġġttġagġġc  ġtġtġġġġt
6061  tġctcġtgac  catcatġtġc  cagtacaact  tġctġcġġcġ  ġccacagġcġ  atġcġtġtġt
6121  ctaccaagġc  tġtġġagġat  ġatġtġġacġ  tġġccagtġa  ġcġġcagġcġa  ġtġctġcġġġ
6181  ġagacġġcġa  caatġacatġ  ġtcaagātġġ  āġaacġtġac  caagġtġcāc  āāġtġġġġa
6241  āġattġġcġġ  tatġcġġġcġ  ġttġacġġcġ  tġtġcġtġġġ  tġtġcġtġcġt  ġġcġagtġġt
6301  tġġġġtġcġt  ġġġcġtcaac  ġġtġcġġġcā  āġaccagġac  cttcaagatġ  ctġaccġġcġ
6361  acġagagġac  ġacġġġġġġc  ġāġġcġttġc  tcaatġġaca  cāġcġtġġtġ  āāġġāġtġc
6421  tġcāġtġġa  ġcāġāġcġtġ  ġġctactġġc  cġcāġtġtġa  cġcġtġtġtġ  ġāġġāġtġc
6481  cġġġġġġġa  ġcāġtġġcāġ  ctġtācāġcġ  ġġctġcġtġġ  ġatctġcġtġġ  āāġġāġġġġ
6541  cġġġġtġġt  ġāāġtġġġt  ctġġāġāġc  tġġāġtġġc  cāāġtāġcġa  ġācāāġcġġ
6601  tġġġcāġtā  cāġcġġġcġ  catġctcaāġ  āacāāġcġġa  āġctctġcāc  ġġcāctġcġc  ctāāġtġġt
6661  ācġcāġcġtt  catcttġcġġ  ġāġāġcġcā  ccācāġġcat  ġġācġcāāġ  ġġcġġġcġt
6721  tġctctġġā  cġtcatcġtġ  ġācctcatcā  āġācāġġġcġ  ttcāġtġġtġ  ctġacatcāc
6781  ācāġcatġġa  ġġāġtġcġāġ  ġcġtġtġġa  cġcġġtġġc  catcatġġtġ  āāġġtġcġc
6841  tġcġġtġcġt  ġġġcāġcatġ  cāġcāġtġa  āġācġcġġt  tġġāġatġġc  tacatġatcā
6901  cġġtġcġġā  cāāġāġcāġ  cāġāġtġtġa  āġācāġtġġt  ġcġġttġtġc  āācġcāāġt
6961  tġġġāāġc  catġctcaāġ  ġāġcġġcāc  ācācāāġġt  ġcāġtācġāġ  ctāāġtġcġġ
7021  āġcācatctġ  ġctġġcġcāġ  ġtġttcāġcā  āġatġġāġcā  ġġtġtġtġġc  ġtġctġġġcā
7081  tġġāġāġtā  ctġġtġcāġ  cāġācācāc  tġġācāatġt  ġttcġtġāc  ttġġcāāġa
7141  āġcāġāġtġa  cāācġtġġāġ  cāġcāġġāġa  cġġāġcġġc  atġcġcāġtġ  cāġtġġġtġc
7201  tġġġtġġt  ġctcāġcġtġ  ctġcġġcġcġ  ġġtctġcġcġ  cācġġāġtġc  cġġġcāġttġ
7261  tġġcāġcāġ  ġcġcġāġġāc  ctġġācāġġ  āġġācāġġġ  cġtcatcāġ  ttġcāġġāġġ
7321  āġcġġcġcā  ġctġtġcġtġ  āacāġġācā  cġctġtġcġtġ  ācācġcāġa  ġctġġġcġāġ
7381  ġġāġācāġ  ctġcāġtġac  cācġcāġāġ  tġġġcāġġġ  actcācāat  ġġġācāġā
7441  ġtġġġcāġt  ġcġtġcġāġġ  ġcġtġġāġtġ  ġāġġttcāġġ  ācāāġġġġc  ttġtġġtġcġt
7501  cġāġcġġtġ  tāctcġġcā  tġcġctġcġġ  tġctġcġġt  tġcġcġcġcġt  āāttġtġcā
7561  āāġġtġācġ  cġġcġcġġġc  tġcġtācācġ  ctġġcġctġc  ttġġcġtāā  āġcġtġcġġġ
7621  tġtġcġcġġc  cġctġcġcġc  tġcġtġġcāc  tġctācġcġc  cāāġġcāġ  ġcġġtġġā
7681  cġāġcāġtġ  ctġġcġttġc  tġctġcġcġġ  cġctġġāācġ  āġcttttġcġ  tġttācġāġtġ
7741  āāġġtġāġtġ  cġġāġāġcġġ  ġctġtġġġġcġ  ġāġctġġġtġ  āġtġcġtāġ  ttāttttġcġt
7801  ttġāġāāġāġ  ġctġctġtġġ  cġctġcġtġc  ctġcāġġġāġ  ġtġġtġtġc  cġcġġāāġc
7861  catcāġcttġ  ġġcāġctġġ  cāġġtġġcāġ  ġāatġġāġā  ġctġācġctġ  ctġġcāġġc
7921  āāġġġcġāġ  ācġcġcġcā  ācġcġcāġt  ġcāctcġtġc  tġcācġcāġ  ctġġcġcġc
7981  tġcġcġcā  cġtġcġtġġġ  āġcġġġcġt  ġtācatāġcġ  cācāġatġtt  tġttttāāt
8041  āāatāācāā  āāġtġc

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LOCUS (LOC): AB037924 GenBank (R)
GenBank ACC. NO. (GBN): AB037924
GenBank VERSION (VER): AB037924.1 GI:9711458
CAS REGISTRY NO. (RN): 284459-17-2
SEQUENCE LENGTH (SQL): 298
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 12 Oct 2000
DEFINITION (DEF): Homo sapiens mRNA for ABC1, partial cds.
SOURCE: Homo sapiens placenta cDNA to mRNA.
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 60 a 87 c 77 g 72 t 2 others
REFERENCE: 1 (sites)
AUTHOR (AU): Zhao,L.X.; Zhou,C.J.; Tanaka,A.; Nakata,M.;
Hirabayashi,T.; Amachi,T.; Shioda,S.; Ueda,K.;
Inagaki,N.
TITLE (TI): Cloning, characterization and tissue distribution of
the rat ATP-binding cassette (ABC) transporter ABC2/
***ABCA2***
JOURNAL (SO): Biochem. J., 350 Pt 3, 865-872 (2000)
OTHER SOURCE (OS): CA 134:189574
REFERENCE: 2 (bases 1 to 298)
AUTHOR (AU): Ueda,K.; Kioka,N.; Tanaka,A.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (02-FEB-2000) Kazumitsu Ueda, Kyoto
University Graduate School of Agriculture, Division of
Applied Life Sciences; Kitashirakawa, Sakyo-ku, Kyoto,
kyoto 606-8502, Japan (E-mail:uedak@kais.kyoto-u.ac.jp,
Tel:81-75-753-6105, Fax:81-75-753-6104)

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FEATURES (FEAT):

Feature Key	Location	Qualifier
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L3 ANSWER 174 OF 174 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): HSU18236 GenBank (R)
GenBank ACC. NO. (GBN): U18236
GenBank VERSION (VER): U18236.1 GI:609357
CAS REGISTRY NO. (RN): 161102-16-5
SEQUENCE LENGTH (SQL): 393
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 30 Nov 1999
DEFINITION (DEF): Human ATP-binding cassette protein (***ABCA2***)
mRNA HHCMH89 clone, partial cds.
SOURCE:
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
Hominidae; Homo
NUCLEIC ACID COUNT (NA): 86 a 118 c 126 g 63 t
REFERENCE:
1 (bases 1 to 283)
AUTHOR (AU): Adams,M.D.; Dubnick,M.; Kerlavage,A.R.; Moreno,R.;
Kelley,J.M.; Utterback,T.R.; Nagle,J.W.; Fields,C.;
Venter,J.C.
TITLE (TI): Sequence identification of 2,375 human brain genes
JOURNAL (SO): Nature, 355 (6361), 632-634 (1992)
OTHER SOURCE (OS): CA 116:122477
REFERENCE:
2 (sites)
AUTHOR (AU): Allikmets,R.; Gerrard,B.; Glavac,D.; Ravnik-Glavac,M.;
Jenkins,N.A.; Gilbert,D.J.; Copeland,N.G.; Modi,W.;
Dean,M.
TITLE (TI): Characterization and mapping of three new mammalian
ATP-binding transporter genes from an EST database
JOURNAL (SO): Mamm. Genome, 6 (2), 114-117 (1995)
OTHER SOURCE (OS): CA 123:77444
REFERENCE:
3 (bases 1 to 393)
AUTHOR (AU): Dean,M.C.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (02-DEC-1994) Michael C. Dean, National
Cancer Institute, NCI-FCRDC, Frederick, MD 21702, USA

FEATURES (FEAT):

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SEQUENCE (SEQ):

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